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EDITED BY
ANGUS SINCLAIR

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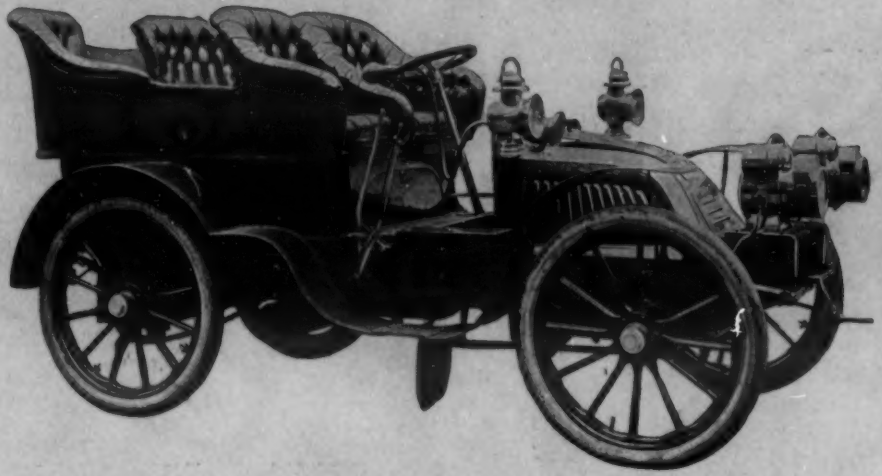
The Panhard



The Renault

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Agents and Importers of Highest Grade Automobiles and Parts

THE AUTOMOBILE MAGAZINE

VOL. IV OCTOBER, 1902 No. 10

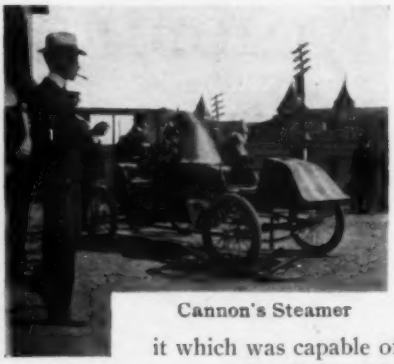
New York's First Track Races

THAT records fell by the wayside on the occasion of the race meet held at Brighton Beach under the auspices of the Long Island Automobile Club, was in no wise due to either the auspices or the occasion. It was a case of opportunity and an easy mark, and the opportunists re-marked the record slate; that was all.

There was considerable disappointment about the meet; thirty vehicles had entered, of which quite one-half were conspicuous only by their absence. Naturally, this robbed the affair of almost every semblance of a race meet, and left it more of a let-us-see-how-fast-you-can-go affair, which was neither inspiriting nor instructive to the thirty-five hundred or more people who had journeyed to Coney Island with hopes of seeing some hair-raising, blood-tingling contests between world-beating vehicles. That was the press agent's tip, and it was the public's expectation; once more realization fell

far below both promise and possibility. The whole affair was as tame and as placid as a kitten lapping a pan of milk.

With the call for the first event came the beginning of the day's troubles. The stewards discovered that under rule three of the American Automobile Association the machine of the two Harvard students, George C. Cannon and T. L. Marsalis, who had built the steam vehicle they were to race with, was not eligible because it required more than one to control it and that the only vehicle entered against it which was capable of giving the semblance of a race was that of T. W. Howard, and it was over weight. As these were the two special carriages, really the "originals" of the meet, that everyone was anxious to see, the disqualification of both of them caused much dissatisfaction. Cannon came from Boston and Marsalis from Maine to enter the races, and they felt much aggrieved. They are both students in the Lawrence Scientific School of Harvard, and Cannon built the machine himself.



Cannon's Steamer

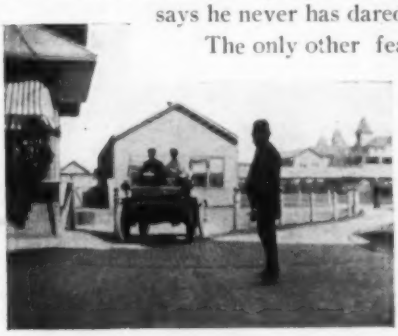
The Cannon vehicle had been tried out on the track earlier in the week, and no one of the stewards who saw it made any objection to it. The disqualification at the last moment seemed to many to be an injustice, but it was in strict accordance with the rule. An exception to the ruling was taken by Cannon on the ground that in the gasolene carriages the second man was not really helping to run the machine because he was pumping oil. He contended that his car really was controlled by one man, Marsalis, and that all he did was to steer.

Harkness and his Mercedes

The Cannon car, as its picture shows, is somewhat suggestive

of the Baker electric that caused the catastrophe on Staten Island on May 31. It is a low, rakish skeleton frame with a boiler three feet in diameter in the middle from which a big smokestack projects and points backward at an angle. The wheels are only 28 inches in diameter. In front there is one seat behind a steering wheel and abaft the boiler is a seat for the occupant whose duty it is to attend to the proper working of the boiler, etc. Both the seats are elevated but not enclosed, as was the case in the Baker. When this vehicle ran around the track a mile in 1:07⅜, the throttle valve was opened only one-fourth of the way. Cannon says he never has dared to throw it wide open.

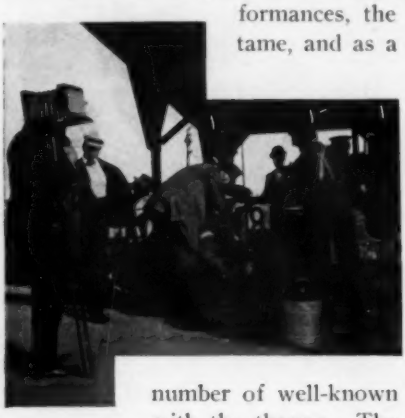
Percy Owen in Winton



The only other feature of the affair was H. S. Harkness with a big Canstat Daimler, which was delivered by the customs officials only two days before the race, which made the remarkable handling of it by Harkness something which made professional chauffeurs stare. Mr. Harkness negotiated the turns like a Fournier, running so close to the infield fence that it would have been shocking if it had not been admirable. In the five-mile event, when this machine of 45 H. P. was pitted against Percy Owen's 20 H. P. Winton, the big foreigner made new records for every mile of five, so far as heavy automobiles in competition on the track are concerned.

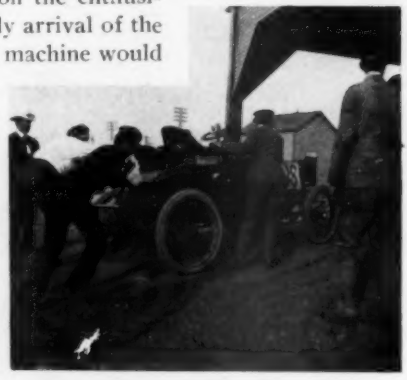
In the five-mile event for light gasolene carriages the time of 8:30, made by Longuevez, is the best made by gasolene cars of under 1,000 pounds.

With the exception of the Cannon, Harkness and Howard performances, the whole affair was worse than tame, and as a climax two interesting events were declared off. One of these was the 25-mile race with lap prizes. In spite of this there were long pauses between the races and the finish was late. There was not a single close finish during the afternoon, if one excepts the pursuit race.



The crowd on hand was one partly fashionable and a number of well-known drivers and turfmen mingled with the throng. The betting ring and the paddock were filled with the machines of visitors who had ridden in them to the meet.

Results showed that while records suffered some, the greatest injury had been visited upon the enthusiasts who had looked for a speedy arrival of the day when the horse as a racing machine would be supplanted by a pint of gasolene or a pound or two of steam. The facts and figures of the case were these:



One-mile heat race, for vehicles under 1,500 pounds.—First heat, steam carriages, won by Thomas Holden, Jr., Locomobile, 800 pounds; time, 2:01. L. E. Holden, Locomobile, 1,800 pounds, second; time, 2:27⅘. L. A. Hopkins, Locomobile, 850 pounds, third; time, 2:31⅖. Second heat, gasolene vehicles.—Won by C. J. Wridgway, Peerless, 1,400 pounds; time, 1:39½. Jacques Longuevez, De Dion, 800 pounds, second; time, 1:51⅜. L. E. Holden, Waltham, 800 pounds, third;

time not taken. Holden finished three-eighths of a mile behind Wridgway. Final heat for winners won by C. J. Wridgway, gasolene, Peerless, 1,400 pounds; time, 1:38.

Ten mile free-for-all.—Won by H. S. Harkness, Mercedes, gasolene, 2,130 pounds; time, 11:54⅘. F. A. La Roche, Darracq, gasolene, 1,500 pounds, second; C. J. Wridgway, Peerless, gasolene, 1,400 pounds, third. Won by 1¾ miles.

One mile exhibition against time by J. W. Howard, steam. Time, 1:09⅜.

Five-mile race for gasolene vehicles between 1,000 and 2,000 pounds.—Won by F. A. La Roche, Darracq; Percy Owen, Winton, second. Time, by miles, 1:24, 2:42, 3:59⅜, 5:20⅘, 6:42; all new records for this class of machine on a track.

Five miles for steam vehicles, all weights.—Won by J. W. Howard, 1,400 pounds, Howard; Thomas Holden, Jr., Locomobile, 800 pounds; time, 9:05.

Five miles, for gasolene vehicles under 1,000 pounds.—Won by J. Longuevez, De Dion-Bouton; L. E. Holden, Orient, second; Time, 8:30⅘.

Unlimited Pursuit Race.—Won at 4¾ miles by H. S. Harkness, gasolene, Mercedes; J. W. Howard, steam, second; F. A. La Roche, gasolene, Darracq, third; time, 6:18.

Obstacle Race.—Won by W. F. Murphy, steam, Locomobile; time, 1:51⅕.

Trials Against Time, by G. C. Cannon and H. S. E. Harkness in steam vehicles. Cannon's time, 1:07⅜; Harkness's time, 1:09⅕.

As They Motored Along

"I love you, dearest girl!" he said
"Oh, be mine!"
She handed him her card. It read:
"Ida Kline."

He, She or It

FRENCHMEN, who alone seem to have time for such discussions, have wasted considerable energy in trying to decide exactly what the gender of the automobile is. In an endeavor to aid them in this, to Frenchmen, highly important question, the Académie Francaise undertook to finally determine the matter, and has now officially declared that "he" is the proper pronoun for the automobile. This, in spite of the fact that yachts, steam engines and other inanimate means of travel are "shes" according to popular usage.

Judging from the irresponsible and illogical actions of some motor vehicles when allegedly they are under control of novices to do the unexpected, "she" seems to us to be eminently suitable. However, there is already trouble enough between the sexes, and perhaps the best way out of the whole affair would be for the Frenchmen to follow our example and henceforth refer to the automobile as "it." Then it could be "he" or "she" according to "his" or "her" nature.

One More Drawback

"This automobile game is a failure, so far as courtship is concerned."

"Why?"

"With the goggles he wears a girl can't look the man in the eye to see whether he is in dead earnest or not."

An Evening Ride

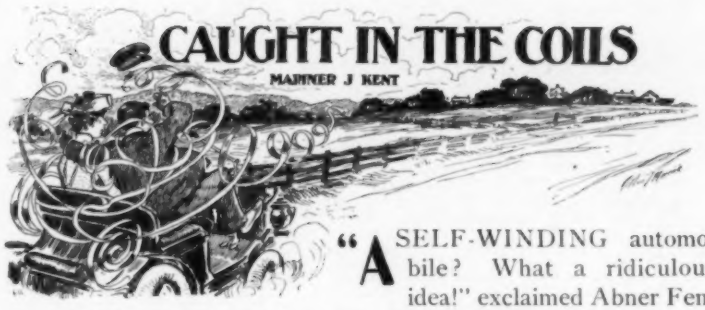
Out o'er the thronged pavements,
  Dodging now car, now cart,
Silent as night in the desert,
  Yet of the boisterous mart.

Leaving the roar of traffic,
  The smoke-roofed, stone-walled street,
On to the boundless prairies,
  Where earth and heaven meet.

'Twixt the sunflower's bordering yellow
  Or horizonless fields of green,
Brushing the startled quail brood,
  Reflecting the low sun's sheen.

On to the mound, tree-fringed,
  Where the evening's softening light
Kisses with longing its earth love
  Asleep in the arms of the night.

—HENLEY MORTON, Abilene, Kans.



"A SELF-WINDING automobile? What a ridiculous idea!" exclaimed Abner Fenton, and added, "you might as well talk about a gasolene watch."

"My dear sir," responded the inventor, with some acerbity, "a blind pup does not know much about astronomy, and I opine that your knowledge of mechanics is likewise limited. The unthinking herd are prone to say that the man of advanced thought is a mental wobbler. A man with a flyblown brain once taunted me with being ahead of the times and, therefore, a crank. 'Back off,' I replied, 'you are behind the times, that's all.' "

"Mr. Fenton," continued the inventor, "let me put you wise. I'm not wriggling here to deceive any one, nor am I trying to revolutionize anything. My invention is simply an attachment that can be put on any vehicle without regard to the motive power used. It is, in fact, an auxiliary motor to be used when emergencies arise." The inventor stopped for a moment to ease his tongue and at the same time handed Fenton several drawings for examination.

"In outward appearance," resumed the inventor, "the device is an ordinary cylinder three feet in length and twenty inches in diameter. It can be attached to the body of a vehicle above or below as desired. Running through the center of the cylinder, which of itself is a light steel shell, is a shaft and at each end of this shaft is a sprocket-wheel carrying a chain that connects with a cog on the propelling gear. Within the cylinder around the shaft, equi-distant, are five rods carrying five strands of powerful coiled steel springs. There are fifty springs twenty-five feet in length to each stand, or two hundred and fifty springs in all, with six thousand two hundred and fifty feet of that imprisoned force that, for two hours or more, will do the work of a motor of three horse power.

"The springs are wound up or coiled by the vehicle itself as

it runs with, as it may be called, its waste power, as only one spring is wound up at a time. When the last one of the two hundred and fifty springs is coiled the emergency motor is ready for work. All of the mechanism in the cylinder is automatic, and because of its ingenious construction and its simplicity I call my attachment 'The Self-Winding Wonder.'

"If," concluded the inventor, "from any cause you need more power for your vehicle than the regular motor can supply, by turning a wheel on the cylinder you can put at work one or two or all five of the stands of springs. If your regular motor gives out entirely you can bring your carriage home safely in the two hours or more than the "wonder" will run if the power it supplies is carefully conserved."

To sell certain kinds of goods a man must either be a fakir or a hypnotist and as, perhaps, the inventor had the art of one and the gift of the other, he sold Fenton one of his attachments. As the vehicle that was to be reinforced was a light and low one, it was decided that the "wonder" should be placed on the body back of the seat.

Through love of excitement Fenton had become a daring automobilist, and through love of Amy Gilbert he had almost become a blithering idiot. He was ears-over-head in love with this summer girl, but his insight had failed to discover the state of her heart. She had a way of winning tenderness that was divine at times and between times was charming, gay or conventionally stately. Her changeable moods perplexed Fenton and his love remained undeclared. A man's egotism often shuts out the light of love and Fenton's regard for his vanity in case he failed to win his suit fostered failure through his lack of nerve to face the music. So he danced attendance on Amy like a school-boy lover and vainly strove to fathom her heart. He was blind to the fact that no man ever probed the depths of a woman's heart excepting with the scalpel of inflicted pain or with the magic wand of love unselfish.

Amy Gilbert was an up-to-date, self-contained girl who could distinguish between a manly man and a lobster man. She was not one of the follow-me-lad girls, but she was very attractive and men pranced in her train whether she would or no. In the end she mixed them up so badly that they fain would know whether she was unattainable or simply inscrutable. But she did not throw

down Fenton and let him enact the role of the silent lover without a sign that would urge him on to speak.

The automobile had its "self-winding wonder" in place behind the seat and Fenton and Amy were out for a long trial of its ability. Fenton had made up his mind that he would win or lose that day and was betting with himself whether he would or would not flunk at the very last moment. A propitious time had arrived. They were on a lonely country road and not a house interrupted the view. Fenton was about to say something when, unluckily, the carriage slowed down of its own accord. Evidently there was something the matter with the motor and the time was ripe to test the "wonder."

Fenton shut off the power and gave the wheel on the cylinder a sharp turn. Inadvertently he turned it fully round and let off the whole five stands of springs at once. There was a sharp crack and the cylinder burst apart lengthwise like an old coat rips up the back. Then came a crashing and tearing of steel, and in a second the air was alive with the two hundred and fifty released springs that, shooting high, gyrated and writhed and twined like maddened serpents. Amy involuntarily clung to Fenton for protection, and it suited him to put his arms around her and hold her fast. Now, as the springs recoiled, they wound around Amy and Fenton in ever-circling strands of steel that interlocked and kinked until the two were laced together with an unbreakable network of steel bands.

Amy was a mirthful girl and the ludicrous side of the affair drove away fear. Her face was very close to Fenton's and suddenly he pressed his lips to hers. "It is unmanly of you to take advantage of my helplessness," said Amy indignantly. "It may be so," replied Fenton, "but it is natural and human, for I love you with all my heart and soul. I was at the point of asking you to be my wife when this accident occurred."

"Did you spring this thing on me with intention?" interrupted Amy, still indignant.

"It was all the doings of that blessed inventor," replied Fenton, and then he said many things that need not be repeated here.

"Amy," remarked Fenton after a time, "since ours is a spring engagement wouldn't it be in form for us to marry in the autumn?"

"I will say anything," responded Amy, "if you will only get us out of this cage." Fenton braced himself and put forth a mighty effort but only succeeded in freeing his right arm. He pulled on

the lever and the motor, having gathered power while at rest, responded and ran all right. Night had overtaken the lovers and under the cover of darkness Fenton speeded for the home of the inventor. Upon reaching it the inventor, after considerable labor, removed the last of the springs and Amy and Fenton were clothed in their right minds, for during the time of their captivity they had been looney with love.

"Don't be glum," said Fenton to the inventor, "for it was my fault that the attachment was smashed. You may not catch on, but its unwinding wound me up to the pitch of harmonic symphonies. To-morrow I will send over the carriage to have a new "wonder" put on. I wouldn't be without one. Would you, Miss Gilbert?"

"No," replied Amy, softly. Her vision, luminate with the starshine of the skies, saw the smiling face of love resplendent amid the ruins of "The Self-Winding Wonder."

Yes or No

"Give me an auto," doth she pray;
"In the fashion I'd like to be,
I'd love to ride the live-long day
In spite of your harsh decree!"
But, when he declines for lack of "dough,"
I fancy that you can guess
What the outcome is, when he says "no,"
And the lady whispers "yes!"

"You ride with your horse and with your hound
While I sit sewing all day;
You go to your club and pass around
The oldest of old Tokay!
And, when you come home, and 'draw the bow'
By fibbing—well, more or less,
Do you really think you can say 'no'
When your lady whispers 'yes'?"

"I'll forgive all your faults with pleasure,
Won't go through your pockets again,
I'll love you—I will, without measure,
(If that auto I can attain!)
And what care I for a furbelow,
A new spring bonnet or dress,
If you will only alter that 'no,'
When your lady whispers 'yes'?"

Where Knowledge is Power

GEORGE E. WALSH

ONE of the most disagreeable features of an automobile trip through a new country away from any large town or city is a breakdown where there is no one in the neighborhood who seems to understand the first principles about mechanics. The amount of dense ignorance shown even by some workmen in country repair shops is appalling. A trifling accident to an automobile may often be repaired by a skilful workman inside of half an hour, while a bungling mechanic will work hours at the job and do no good.

The driver of a horse-drawn conveyance has any number of wagon repair shops and horse-shoeing establishments scattered all along his route where he can apply for assistance if anything happens to either horse or equipage; but the automobilist is much like the mariner who starts out on an ocean voyage. He must depend upon himself for all repairs, and if he cannot do this he may be stranded at any moment without hope of immediate help.

Until adequate repair shops are scattered over the country, it should be the purpose of every chauffeur or owner of an automobile to thoroughly familiarize himself with every part of the mechanism of his vehicle so that he can make ordinary repairs on the road himself. It is for this purpose that a kit of tools is always carried with the vehicle, and if one understands how to use them he will be as independent as the aforesaid mariner on the high seas.

The average bicycle rider who makes a long tour through the country carries with him a full knowledge of the construction of his machine, and with the few simple tools in his bag he can make almost any imaginable repair to the wheel or tires. It is this preparation for any emergency which makes him an independent rider through a strange country where the wheel is a novelty and repair shops an unknown quantity. There is no good reason why an automobilist should not be equally well equipped with a knowledge of the working mechanism of his conveyance, since the automobile, after all, is not a complicated affair. Its machinery is really simple

in design and operation. A few instructions from an intelligent mechanic at the factory or repair shop will enable an ordinary man to do his own repairing in an emergency. Experimental work in taking apart different sections of the machine should be made a part of these lessons, and not until the manipulator can do this properly should he consider himself an expert driver of an automobile. There would be fewer accidents and breakdowns on the road, and far less troublesome experiences in isolated regions, if every owner learned the lessons of handling his vehicle by some such thorough method as this.

More than this, a mechanical knowledge of the driving and operating part of an automobile would prove a distinct advantage to any owner who wished to get the best out of his purchase with the least possible amount of wear and tear. The engineer of any vehicle who understands his machine thoroughly knows the difference between an expert and inexpert driver. One will favor his carriage so that it will last nearly twice as long, and give more actual efficiency. There is such an important relationship existing between the life of an automobile and its daily handling that the question should be considered by every owner of a machine. If one trusts the driving of his automobile entirely to a hired man, it should be ascertained beyond doubt that the man is thoroughly competent not only to drive the vehicle skilfully, but to take it apart and put it together again.

There are only a few levers and wheels to manipulate in driving an automobile, and one can in a short time easily become quite expert in handling these. The vehicle can be made to go slow or fast, and to turn sharp corners with comparative ease. One may even become expert in dodging wagons and pedestrians while proceeding at a fair speed. But such efficiency should not constitute the full lessons of the chauffeur or of an owner who intends to drive the automobile himself. There should be a comprehensive understanding of the nature of the whole mechanism.

It may not have occurred to some that there is almost as much individuality in a motor as in a horse, but it is a fact which cannot be too highly appreciated. One will show a crankiness in running that will puzzle its builders, and another will run so smoothly and uniformly that it will prove a delight to its owner. Nearly every machine has its weak points, and it is the duty of the driver to find these out and to favor them just as he would a high-bred roadster

who possessed some slight defect which otherwise did not affect his standing as a good animal.

The amateur and the novice always start and stop a machine by a series of short jerks, which is a strain to the mechanism; in fact, many drivers, no matter how much experience they have, never quite overcome this novice-like method, simply because they do not understand the nature of their iron steed. If half the accidents and breakdowns to automobiles could be classified, it would be found that a great majority of such misfortunes were due either to poor driving or to the neglect of some slight derangement in time to avert the disaster. Occasionally the fault is with the manufacturer, and again it is with freaks which no possible foresight could have averted. These accidents, however, can be dismissed from the present discussion because they will be gradually remedied through the combined efforts of inventors and manufacturers. Those resulting from ignorance or carelessness are the ones always the most aggravating. They are as irritating as a delay caused by forgetting to fill up the tank with gasoline before starting on a long trip.

Creaking springs and groaning mechanism are the most common accompaniments of ill-kept automobiles as they proceed along the public thoroughfares. Oiling does not suffice for this, and the incompetent driver waits for a favorable oportunity to send the vehicle to some repair shop, there to discover the cause of all the noise. A man with a fair knowledge of the construction of his automobile could find out the cause of the noise in five minutes, and remedy it as quickly. The neglect which ignorance allows to progress means eventually a bill for repairs that astonishes the man who has to pay it. It also means the shortening of the useful life of the automobile by many months. A fractured axle is more often due to unskilful driving than to faulty construction. When driving over a hard, rough road the axles are strained to their utmost, and if the driver does not know how to negotiate obstructions he is in a fair way to break something. He may proceed in this careless way a dozen times without meeting with accident, but the thirteenth time he may pay for all. Each successive strain has tended to weaken the axle, until finally a slight extra burden cast upon it causes the mishap.

It would be hard to convince one ignorant of the reasons for this that he was the sole cause of the unpleasant experience, and that nothing save his faulty operation of the machine was to blame

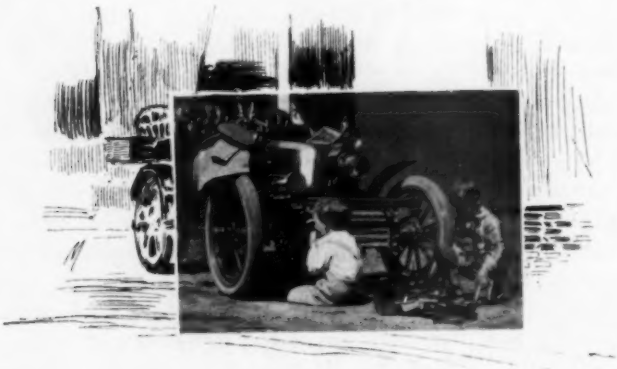
for the breakdown. Such experiences rarely happen to the expert operator who knows the principles on which his machine is constructed, and has gone below the mere surface instructions in his driving of an automobile. The man who is not the master of his vehicle is in no position to accept anything as due to his ignorance and inexperience. The blame is always laid to the machine.

The Scorcher

Hurry,
Scurry,
Off with a flurry,
Dodging the cable cars,
Pushing his way through the thoroughfare
With many a jolt that jars.

Speeding,
Impeding,
Others unheeding,
An oath for those who protest;
A laugh for the pedestrian he brushes aside,
And never a thought for the rest.

Dashing,
Splashing,
Nothing abashing,
Over streets all slippery with slime;
Then an extra spurt and a finishing jerk,
And he saves a minute of time.



The Story of Number 134

(Begun in September Issue)

NED WILLSON

RESCUING the automobile from the bed of the creek with the assistance of two brawny farm hands and a team of horses, and cleaning it of its coating of mud, provided the Chief Prevaricator with amusement for the balance of the afternoon. The office boy having arrived, in response to a telephone message, with clean raiment, he was soon presentable. A hasty inspection showed no further damage than a few broken spokes, although how he escaped a buckled wheel or even worse damage is hard to see. Careful running brought him back to the city that evening about eight o'clock without further misadventure.

The following morning, true to his promise, his companion of the day before was on hand and waiting for him when the C. P. arrived at the office.

"Morning, sir!" greeted the oil man. "Have much trouble getting home?"

"Oh no. It was kind of hard work pulling out of the creek, but there wasn't any damage worth speaking of and I'm all ready for a ride this morning, so soon as my man gets the balance of the mud cleaned off of her. And while he is getting it into presentable condition suppose I introduce you to a few more levers and things."

"All right! 'Barkis is willin'.' I'll get it through my head if it isn't too badly clogged up with mud."

And so they spent the next hour on the catechism of the automobile. All went smoothly until they came to the igniter, the explanation of which the oil man made his instructor repeat several times.

"Well, now, say, Mister," he asked him finally, "where do you get your electric juice to fill up them cans? Do you have to put it in while she's hot?"

"Oh no!" replied the C. P., repressing a smile, "you simply throw away these old batteries and put in new ones if your current gets too low. It is a good plan to always carry with you an extra battery in case the one that you are using should give out for any reason."

"Oh, I see!" replied the pupil. "You buy the stuff already canned and don't have to burn your fingers filling 'em up. I knew

a fellow up our way once got to fooling with some of this electricity and he was filling one of these dudads when he spilt the stuff on his clothes and you ought to see the holes he burnt through 'em."

"Well, I never heard of it doing that, but anyhow these are sealed up and nothing can get out to do any damage."

"Say, how do you take hold of these here cans so they won't burn you?"

"Why, there's nothing hot about them. Look here," answered the Chief Prevaricator, placing his hand on the top of the battery.

"Well, then, what made you jump so yesterday?"

"Oh, I got hold of one of the plugs that is attached to the jump-spark end of the coil. You should never touch that part of it when this little handle is turned on the switch to the point marked 'ON.'"

"Oh, this is that other kind of electricity you was telling me about, ain't it? I suppose they call it the jump-spark because it makes you jump."

"No, not exactly that," answered the agent, smiling and removing one of the ignition plugs. "Here you see these two little platinum points with a gap between them. Now ordinary electricity won't pass between two wires unless they are touching. That is because the pressure is too low. The jump-spark coil which you see here raises the pressure so that it will make the current jump this gap, and that's why it is called a jump-spark. Now I'll lay the plug on the engine and you may keep your eyes on it and your hands away from it while I turn the engine over. Notice that every time the engine gets to a certain point in a revolution, this little spark jumps across the gap, and as it is inside the cylinder it explodes the mixture of vapor and air."

"Say, how about these explosions? Ain't they likely to do some damage?"

"Goodness, no, man, that's what makes the engine run. Gas engines don't explode. They leave that to the gasoline stove."

"Say, about these wires you was telling me a little while ago; this is the negative wire, isn't it, going up to this screw, and this is the affirmative wire going up to this other screw?"

"No, no; you're twisted all around. This is the negative wire going over here and this is the positive wire, not the affirmative."

"Guess I did get twisted that time, but I always thought negative and affirmative went together."

"Not in electricity."

"Say, have you got plenty of gasoline this morning? I'd like to get hold of those levers myself if you can find a road broad enough. I never steered anything more ornery than a baby mule. I don't know whether this critter would understand my gee-haw or not."

"Yes, we've got lots of gasoline. I had the tank filled when I started back yesterday as I was fortunate enough to find some gasoline at a country grocer's. The tank had emptied itself through the vaporizer while it was roasting on the bank, and I was pretty near stumped for fuel to get home on. I guess she's pretty clean now, so I'll take you out on the boulevard and when we get to a quiet place I'll let you learn to steer."

About three miles out they found a stretch of road of good width and level, where the teacher and pupil changed sides, and with the transmission at the eight-mile speed the machine began a snaky course under the guidance of the parvenu. The agent had been carefully instructed at the factory to be very chary about allowing a beginner to have full control of the machine and to allow him only to steer, so he kept his feet on the brake and the clutch lever in order to be able to stop the machine at any time. It was well that he did so, for they had not gone more than half a mile before, for seemingly unaccountable reasons, the machine made a sudden swerve to the left and crossing a shallow ditch started to climb the grade to the trolley track.

"Whoa! Whoa! Gol darn ye, stop! Hold 'er mister, hold 'er!" But the request was hardly begun before the clutch was thrown out and the brake was hard down. "Well, I nearly did it that time. Guess I must have forgot which way to turn the wheel. I was just trying to keep from going into that ditch, but the blame thing went the way I didn't want it to go."

"Oh, that's nothing," was the reply; "you'll catch on pretty soon. Just let me back her into the road again and then you can try it over."

Once back in the road the oil man took the steering wheel again and all went well until they got near the scene of their mud bath of the day before. "Look out for dead horses," warned the C. P., as they crossed the bridge, but the road was clear. However, in turning to glance at the scene of the previous day's accident the steersman nearly made another break and only the quick action of the agent saved him from running into a passing team.

"Nearly a wreck that time," admonished his instructor. "One of the first things you must impress upon your mind is never for an instant take your eyes off of the road ahead when you are steering an automobile. Reversing the old maxim, a broken neck may be the price of lack of vigilance."

"I guess that's right, my friend; I'll just keep my nose straight ahead of me hereafter."

"Another half hour's ride brought them to a long stretch of level road with no teams in sight. Slowing the engine down the C. P. threw in the high gear and then gradually opening the throttle and advancing the spark, he had the vehicle going at its maximum speed before the oil man realized the change. He let the carriage run for some time before calling his pupil's attention to it. "Seems to steer a good deal easier," remarked the helmsman, after they had made about a mile and a half at a two-minute clip. "Guess she's getting used to me."

"Yes, an automobile always steers easier when it is going at full speed. Do you know how fast we are going?"

"No, but I noticed she was kind o' picking up a bit. Guess it must be about twenty miles an hour, ain't it?"

"No, you're something over ten miles out of the way. We are moving at a little over thirty miles an hour."

"You don't say! How can you tell?"

"Oh, that's easy. The trolley poles are 100 feet apart and the number you pass in sixty-eight seconds gives the number of miles an hour. It's funny, though, about your guess; most everybody guesses about ten miles too much. Well, here comes a grade. Now, I'll show you how to climb it. It is too much for the high gear and I'll throw in the intermediate. First, press your foot on this lever to throw out the clutch, as you must not try to change the gears when the clutch is in, for it would strip the teeth. You couldn't do that anyway on this machine, as it is so arranged that you must throw the clutch before you can move the gear transmission lever. Always throw in the gears slowly at the start in order to make sure that your clutch is free and then you will not do much damage if for any reason the clutch is stuck. Now when I release the clutch you throw the outside lever back against the stop or until it catches and then throw the inside lever forward until the latch catches in the middle notch."

The previous climb up the trolley grade had made the instructor cautious and he took hold of the steering wheel with one hand

and kept his eye on the road ahead while he threw out the clutch. As he anticipated, the oil man took his eye off the road entirely to watch the clutch lever. He fumbled around for what seemed a long time and finally announced, "I guess that's all right now," and the C. P. released the clutch lever, when both the carriage and the engine stopped at once.

"Well, gol darn my skin! What's the matter now?" asked the steersman anxiously.

"Guess we better get out and look," replied the agent, and stepping to the front he unfastened the hood and laid it on the grass. Then he examined the engine with a critical eye, and seeing nothing wrong, he released the clutch and gave the starting crank a couple of turns when, to his surprise, the engine started and ran in good order. Replacing the hood he took the driver's seat and allowed the clutch to take hold gradually. His astonishment was even greater to see the vehicle start backward, and a glance at the levers showed him that the oil man had thrown in the reverse. Swearing softly, sub rosa, he threw in the intermediate gear and went on up the hill.

It is needless to tire the reader with an account of the numerous "breaks" the pair made during the balance of their trip. Good luck was with them, however, and they reached the agency that evening without serious mishap. The man from the oil country was apparently well pleased with the result of his day's outing, and at the close of a good dinner, at the agent's expense, No. 134 changed hands, in spite of the protests of the agent that he wanted the machine to demonstrate with and that a new one should be sent to his customer from the factory. But the oil man was obstinate and seemingly fearful that a new machine would not be as good as No. 134, so rather than lose his sale the deal was closed, and next month the scene of this story will be transferred to the home of the owner.

When the Unexpected Happens

"WHAT does it feel like to have a bad accident?" said the converted scorcher, as he sat in the club talking speed mania with the youngsters. "Well, it isn't so easy to describe the two or three hundred sensations you have all crowded into a second or so of time when you leave the vehicle, and while in the air wonder when and how you'll land. I remember the first year I was in the game, and I thought the old steam runabout and breakdown I had was a world beater, I was coming home from the Larchmont club at the terrific speed of certainly fifteen miles an hour. Of course you fellows who never think of doing less than double that will laugh at me saying I was scorching, but I was—for those days and those steamers.

"Just before I got to New Rochelle I remember being lifted out of the seat by my running smack into a big chunk of building stone which some careless and lazy teamster had dropped right in the center of the road. As I felt myself shooting through space my first sensation was a shiver down my backbone, because I recognized that the affair was going to have a more or less serious ending in which I was billed for the star part.

"Half a dozen crazy ideas chased themselves through my brain before I picked myself up twenty feet along the road. My first thought was about that precious old tea kettle, but quicker than lightning came another, 'I wonder if I am badly hurt?' Then I felt blood oozing down my forehead and blinding me.

"The next sensation was a whirl of everything. Road, trees, lights and some people who had rushed out of a neighboring cottage when the smash came, all seemed to be circling around at a terrific pace. Then a mist began to creep up before me; it got darker and darker; I made a wild clutch at the fence—then I was down and out.

"They told me, when I came to about an hour later, all this happened in less than a minute—to me it seemed centuries. After that experience I concluded that I and the speed mania had to dissolve partnership right there and then, and we did. What will happen to you youngsters when your time comes at the rate you travel is a bit too awful for me to even think of."

It is a wise child who goes out of sight to laugh when his father proceeds to investigate why a carburettor don't carburett.

As Seen Seventy Years Ago

AS far back as 1831 Parliament appointed a committee to examine and report upon the practicability of a road vehicle which would depend upon steam for its motive power. In the light of the present, the report of that committee of seventy years ago is entertaining. The committee reported:

That carriages can be propelled by steam on common roads at an average rate of ten miles per hour.

That at this rate they have conveyed upward of fourteen passengers.

That their weight, including full water and attendants, may be under three tons.

That they can ascend and descend considerable inclines with facility and safety.

That they are perfectly safe for passengers.

That they are not (or need not be), if properly constructed, nuisances to the public.

That they will become a speedier and cheaper mode of conveyance than carriages drawn by horses.

That, as they admit of greater breadth of tire than other carriages, and as the roads are not acted on injuriously as by the feet of horses in common draught, such carriages will cause less wear of roads than coaches drawn by horses.

Despite all of these obviously true assertions Englishmen and the rest of the world preferred to wait almost three quarters of a century before they turned from the animal to the auto, and they are not showing any overwhelming alacrity even now in making the change.

First Pneumatic Tire

JAMES P. KENSEY

NOTHING is new, not even the pneumatic. As far back as 1846, William Thompson, an Englishman, took out a patent for an inflated tire. It is an interesting fact, and somewhat of a reflection upon British progressiveness, that while Mr. Thompson's invention was very thoroughly tested and was shown to have great advantages, so far as a reduction of tractive resistance was concerned, over the ordinary form of tires, yet it was not deemed of any practical use until more than forty years had elapsed; then the Irish horse doctor, Dunlop, took it up and made fortunes for a host of promoters and a competence for himself.

In 1847, a carriage fitted with pneumatic tired wheels was drawn over a stretch of road in Regents Park, half of the distance traveled being firm and smooth, while the remaining half was covered with newly broken stone. The tractive resistance on the smooth portion of the road was shown to be but twenty-eight pounds with the pneumatic tired wheels while it was forty-five with the ordinary tires. On the newly macadamized portion of the road the pneumatics showed a tractive resistance of thirty-eight and one-half pounds against one hundred and twenty pounds called for by the ordinary tires.

It was proven that even the very crude inflated tires then used stood the wear extremely well, considering the manifest advantages they offered, as the vehicle with which the experiments were made had been driven more than 1,200 miles over every kind of road, and the tires were still in excellent condition.

The first Thompson tires had inner tubes of soft rubber and outer covering of leather to protect them, but in 1849 the leather shoe was replaced by a rubber one, which was thickened on the tread until the result was a tire to all intents and purposes exactly like the one in use to-day.

It may have been the innate dislike of Englishmen for innovations that prevented the rubber tire of fifty-five years ago from having the success then that it is to-day, or it may have been that horses, not human beings, profited then by the ease of traction that the pneumatic fifty years afterwards gave to man who was then as a bicyclist playing the part of his own horse, but be the cause what it may, the whole thing is a peculiar proof of how slowly the world does move.

Automobile Insurance—Fire

(Second Paper)

DIXIE HINES

THE most universally discussed phase of the underwriting business at this time is that of automobile insurance as it affects the fire insurance companies. For the past several months this question has been discussed by the trade papers having to do with automobiles, as well as those papers which are supposed to represent the views and opinions of the underwriting fraternity. In neither, however, has a satisfactory adjustment of the generally misunderstood question been reached. The automobile papers naturally assume to represent the insured, and, in consequence, these advocates see only one side of the question, and that the one where the insurance companies appear in an unenviable light and the automobile owners are posed as oppressed martyrs, suffering for the sins of imaginary individuals and to the end that the companies may declare larger dividends to its stockholders. One automobile journal, in its extreme effort to deal to the insurance companies a fatal blow in retaliation for what the editor alleged was the companies' unjust attitude toward the automobile owner, has suggested the formation of a mutual insurance company to take over all automobile insurance on a mutual basis. Such a suggestion could only emanate from one unfamiliar with the conditions, and must be ascribed rather to overzealousness than to superior wisdom.

It was "Old Abe" who coined a twin aphorism to his now famous "Don't swap horses while crossing a stream," which is peculiarly applicable to the present situation in fire insurance circles. "A leaky boat will leak, no matter how swift the oarsman," President Lincoln said at one time, and this sums up the situation concisely, aptly and truly, as it relates to automobile insurance. No matter who issues the policies, the conditions remain just the same, and if there is to be an improvement, it will be due, not to the men, but to the methods, and these methods are not methods of the fire insurance companies, but rather the methods of the beneficiaries under the policies issued. So long as more attention is paid to protection than to prevention, just so long will it be difficult to secure protection except at high rates, if at all.

Like other forms of insurance, fire insurance must be conducted upon absolutely scientific principles to be successful—and by successful is meant profitable both to the insurer and insured.

Fire insurance rates are based upon more than 1,000 special conditions in nearly every case. The average policy holder doesn't realize what it means to promulgate a rate on a given piece of property or the contents of a special building. Before it can be determined just what rate is charged a careful inspection of the property is made, and there is not the slightest contributing factor which escapes the scrutiny of the inspector who makes the survey. The construction of the building, the age and quality of the material used in its construction, the openings which might make it dangerous to fight in case of fire, its adjacency to other buildings which are inferior insurance risks, the protection afforded against fire, the use to which the building is put and the moral hazard of the owner, are only a very few of the many hundreds of matters to be taken into consideration. It will be seen, therefore, that there is no guesswork in insurance, and when a rate is charged for a particular class of risk it is due to a careful consideration of this particular risk as an insurance hazard, and the rate is determined only after it has been carefully revised and built up on generally accepted lines.

As is the case with liability insurance, fire insurance is based primarily upon the expense of carrying a certain risk. This expense, after an examination of the property itself, is finally determined by consulting the experience table, which is a carefully tabulated and invaluable record of the experiences of the predecessors of the present insurance companies. Naturally, with a class so new as the automobile and its appliances, the rules of experience cannot be applied, nor can the companies devise acceptable rules to govern these conveyances at so early a date, since this can only be the result of experience in writing insurance for years and considering every phase of the hazard. Therefore, the companies at this time are endeavoring to so adjust their rates and restrictions as to make them acceptable to the insured and profitable to the insurer. It is not infrequently the case that both parties to an insurance contract are dissatisfied eventually, and it is not unknown among the insurance companies when the insured gets all the better of it. This is not less frequent than when the insurer receives what is aptly termed in the parlance of the day, "the short end of it."

At the present time there is an almost hopeless minority of insurance companies writing this class of business. A very large proportion of the companies prefer to wait until their more courageous and enterprising, if not wise, competitors build the foundation for safe underwriting. The only reason ascribed by a large majority

of the prominent operating companies for prohibiting automobiles is tersely expressed by the managers as because they are "unprofitable and extra hazardous." Those companies at present engaged in writing them are in an unsettled state of affairs, and their restrictions and rates are in consequence as fluctuating as stock exchange prices. The necessity for fire insurance is so great that, unlike other forms of insurance, one does not have to point out the advantages to be derived from ample protection against loss or damage by fire, the chief thing being the rates charged and the form of policy issued.

From an insurance point of view these considerations are arrived at by a consideration of the risk under two separate headings; first, the hazard of the automobile itself and the proper rate and form of policy to apply; second, the increase in the hazard of the building in which the automobile is stored. To consider the question of the automobile as a risk, it is necessary to divide it into as many different classes as there are accepted motive powers. At present, there are electricity, gasolene and steam, which, by underwriters, are considered with favor in the manner in the order above enumerated. Electric vehicles are naturally preferable risks, and when they are stored in a given warehouse or stable there is no appreciable increase of rate, the only difference between the classification of the building before and after the electric is stored being the requirement of what is known as the "dynamo" clause. This clause, in effect, means that the company will not assume any risk of loss or damage caused by electricity, either artificial or natural, and as adopted by the New York Fire Insurance Exchange, is as follows:

"This insurance shall not cover any loss or damage by dynamos, exciters, lamps, motors, switches, or any other apparatus for generating, utilizing, testing, regulating or distributing electricity, caused by electric current, whether artificial or natural."

Protected by this clause owners of electric automobiles stored at a given point should not find it difficult to obtain sufficient insurance to cover the conveyance by applying to any of those companies which assume the risk of automobiles.

Explosive motored vehicles are first considered for the effect of gasolene itself which is prohibited, except by special agreement, under all insurance policies. There must be considered by the insurers, first, the quantity of gasolene in the conveyance itself, and the safety from igniting, which is best secured by the sealed metal

reservoir within the machine. For this risk companies generally charge only a small advance over the electric machine, using that style of vehicle as a basis for determining the premium and the hazard of the risk. Whether or not a special clause should be required in effect as the dynamo clause above quoted, is a mooted question. Many companies deny liability by a special clause when fire originates in the carriage itself, and so far as this is concerned it is a manifest injustice to the insurer. Permission is frequently given by companies for the use of gasolene stoves in dwellings and stores, and it would be manifestly absurd to assume that companies are not liable for damage done by these necessities. If this permit is given house-owners without charge, there should be no charge for an automobile, since the latter is much better protected than is the stove in a dwelling. Some companies take this view of the situation and others insist upon the eliminating clause, which, at present, is a serious bone of contention between the two parties interested.

When it comes to the steam vehicles, a series of obstacles confronts the insurer which are not easily overcome. To the standard rate charged for the electric vehicle the companies add the charge for gasolene in bulk, owing to the increased hazard due to the pressure tank containing gasolene under an air pressure of from 40 to 60 pounds by which the gasolene is forced into the burner; and, what is more to the point, the presence of a naked flame which, should any derangement of the regulator or a leak occur, would be likely to create a blaze of dangerous extent. To this extra hazard must be added others. The companies assume that the continued flow of gasolene, when the flame is extinguished, and the method of igniting are among the most serious.

In a steam carriage the companies theoretically—for there are few who will put into practice the theory which can only be done by the insurance of policies—insist upon the clause which restricts their liability to loss or damage due to fire originating other than within the machine itself. Steam vehicles, however, when in use are seldom accepted by the companies, and while many of the companies have theories regarding the methods to be pursued in the event such policies were issued by them, there are few of them brave enough to practice their theories themselves.

Naturally the question of class of building in which the vehicles are stored enters into the make-up of a rate, the instances cited above being considered with the rate of the particular building as

a basis. If automobiles are kept, for example, in a stable, where such inflammable matter as hay is stored, the combination would make it a serious hazard, indeed. There are, in every risk, many such details as the above which are peculiar to that particular policy and which cannot be discussed intelligently for the reason that there are seldom two cases exactly alike.

If owners of automobiles, in constructing their storage warehouses or garages, would make the question of safety paramount by absolutely prohibiting the storage of gasolene within the building, it would naturally decrease the hazard of the risk. Gasolene is a dangerous fluid to have about, and arrangements might easily be made to store it in a specially prepared cellar distant from the stable such as one of your advertisers plans to do.

The most popular form of insurance issued on automobiles under the classification of fire insurance is that known as the "floater" policy, a form of policy which affords owners of machines protection against loss or damage by fire to the machine wherever it may be within a given territory. Policies are issued as a rule to cover a given building, under a single situation. When the owner is on tour, however, his policy becomes naturally inoperative until the conveyance is once more within the building given as the location. As touring becomes more and more popular, this floater policy keeps pace with the new conditions. The rates charged for it are not nearly so high proportionately as are the standard stationary policies, since the increased hazard of a floater policy is a matter of serious conjecture, consideration being given to the possibility of a number of such insured automobiles being housed within the same building at a given time, thus making the risk assumed by a single company greater than prudence would warrant. Again, covering as they do the entire state or states enumerated in the form, the possibility—indeed, the probability—of storage in unprotected stables, poorly constructed buildings or insufficiently protected warehouses makes the issuance of the policies a serious matter, indeed. Many companies decline to include the Metropolitan District within the terms of such policies in view of the fact that quite a number of the storage warehouses within this district are, in themselves, owing to serious defects in management and construction, charged a rate almost as high as the floater rate. In many of the country storages where the material is of the flimsiest nature, the companies are compelled to assume a risk under a floater policy which would be absolutely prohibited under ordinary circumstances.

The floater policy is by all means the most popular form of fire insurance, and is, to every cautious owner of an automobile, as much of a necessity as is insurance on his own home. In fact, it is of more importance, since he is cognizant of the defects of his personal property and real estate and can guard against possible loss, but in touring from town to town, city to city, and village to village, he is constantly compelled to assume the risk of storage in a building where the danger from fire is often very great, which risk in the case of an expensive automobile is more than any sagacious owner should be willing to assume.

The terms of the floater policy permit the owner of a vehicle to tour within the state of New York and many others, but owing to the stringent insurance laws of many of the states which forbid the issuance of an insurance policy which is to operate therein except through the offices of a state agent, this makes it necessary for the owner to take out special policies in these states when he is touring within their borders if he desires the necessary protection.

It would be manifestly impossible to quote the rates charged for such policies for the reason that the rates are of such a fluctuating nature. Many vehicle owners are willing to pay any rate charged by the companies for such a policy, and the question in the past has been not at what rate will the policies be issued, but rather can sufficient insurance be secured at any rate? Very few companies will assume a liability on any single vehicle of more than three or four thousand dollars, and when a vehicle is valued at a higher figure than that, it is necessary to divide the amount up among all the companies writing policies. As the number of such companies is very small indeed, it is not infrequently the case that the assured finds himself sadly lacking in ample protection after the broker makes a report. This is especially true of floating policies, because the companies have no way of determining whether or not the different owners will at a certain period store their conveyances together, thereby increasing the risk of each company beyond the point of prudence. Again it must be remembered that while the steam vehicle is the only one on the prohibited list, should such a vehicle be stored in close proximity with a gasolene or electric vehicle, these classes must necessarily suffer in consequence, and yet the company, while absolutely forbidding one class is compelled to assume the risk of such when stored near vehicles of another class insured under their policies. It will thus be seen that the company

is beset by many adverse conditions which makes automobile insurance hazardous, to say the least.

For the benefit of possible insurers copies of the standard forms used by the New York Fire Insurance Exchange will be included. This exchange controls the underwriting fraternity of the Metropolitan District only, and its rulings and clauses may not be accepted by exchanges of other sections, but it may be taken as a fair criterion of the safeguards proposed by the companies for their own protection. These clauses are attached to regular policies under the several conditions, principally when policies cover gasolene machines only. They also refer to the rate charged in addition to the standard rate.

"For privilege to keep not exceeding one such vehicle (propelled by the use of gasolene, naphtha or other hydro-carbon oils) in a private stable with warranty to keep gasolene and fill tanks in accordance with the New York Board of Fire Underwriters' requirements, 10c. per $100.

"For privilege to keep not exceeding three such vehicles in a private stable or in a building not occupied for mercantile or manufacturing purposes, with warranty to keep gasolene and fill tanks in accordance with the requirements of the New York Board of Fire Underwriters, 25c. per $100.

"For each vehicle in excess of three, with warranty as above, five cents additional, not exceeding a total charge of $1.00 per $100.

"For privilege to house not exceeding one such vehicle in a building occupied for mercantile or manufacturing purposes, with waranty that no filling of tanks or storage of gasolene shall be allowed on the premises, 25c. per $100."

At a subsequent meeting of the rate committee of the New York Fire Insurance Exchange the discretionary power was permitted the members of the exchange to rebate fifty per cent. of the rates above quoted where, in their judgment, the risk was particularly acceptable.

The most popular form used in connection with an automobile, on both the stationary and floating policies, is as follows:

$..... on one Blank Gasolene Automobile, No. 1313, including all parts, attachments, tools, implements, utensils, furnishings, fittings and supplies, while within the boundaries of the states of (here follows the states under which the policy is to operate).

The following clauses to be attached hereto and made a part of this policy: Lightning Clause, Automobile Clause.

Permission is hereby given to effect other insurance hereon without notice.

Should the policy be intended to cover only while the conveyance is in a stable or a warehouse, the words "all while contained in a brick stable, situate No. 711 44th Avenue, Borough of Manhattan, New York City," follows immediately after the enumeration of articles covered. The "automobile clause" is that before spoken of relating to the origination of fire within the machine itself.

In conclusion it may be urged that while insurance conditions are in a somewhat chaotic state so far as the automobile is concerned, the owner of a vehicle may rest content that if the existing conditions are bad they must in time be corrected, and the rates charged—the point of most interest to the owners—cannot remain at an unequal figure very long, when there are several hundred insurance companies ready to take a share of the business at any rate commensurate with the risk assumed if it is determined at a later date that the business is safe. It is impossible for rates to be unnecessarily excessive since competition for good business is too keen among the various companies to permit them to remain so long, and if they do remain at this figure it will be because other companies find it unprofitable and taboo the field. Fire insurance is one of our greatest sciences, and science will eventually remedy all evils.

EDITOR'S NOTE.—This is the second of a series of articles on Automobile Insurance by Mr. Hines, an acknowledged expert in this line and an experienced insurance underwriter. The first article appeared in the September issue of THE AUTOMOBILE MAGAZINE on "Vehicle Liability." The next paper will deal with "Personal Accident," and will appear next month. Copies of the September number will be mailed upon receipt of price—twenty-five cents. The Editor of THE AUTOMOBILE MAGAZINE will be pleased to forward to Mr. Hines any inquiries from readers desiring further information about insurance on automobiles.

Half and Half

"I had a mind to buy a steam vehicle."

"You changed your mind?"

"Yes; I have now half a mind to buy a gasolener and half a mind to buy an electric."

Touring Department

New York-Phila. Route

THE NEWARK, CRANBURY TURNPIKE AND TRENTON THROUGH LINE.

SITUATED apart almost exactly 100 road miles, New York and Philadelphia are twin centers of touring interest for the middle seaboard district. They are linked together by a highway system whose few through lines are all but lost in the multitude of local ones. The latter not only obscure the beginning and the end, but may lead to questionings at intermediate points. The mere number of optional routes for short distances along the way is more apt to hinder the progress of the unacquainted tourist with a straightaway idea in his mind than to appeal to his sense of variety. Nevertheless the trip is a good and an increasingly popular one, with a great deal to see and much to remember. It has the additional interest of being an essential link in the usual shaping of a tour to Baltimore, Washington and the South.

For about two-thirds of the distance (from the North River to the Delaware) the run is across New Jersey, thence over a corner of Pennsylvania. Though it can be covered in a day or less, the average tourist will not limit himself to that time. As the distance does not divide equally, in so far as accommodations are concerned, it is a good plan to reach Trenton the first night, making an easier as well as an earlier entry into the Quaker City on the following day. If the return is to be immediate and by the same route, however, it would not be at all difficult to complete the round trip back to Trenton on the second day and reach New York again on the afternoon of the third. This would give the two over-night controls at Trenton; otherwise the one over-night at Philadelphia would be the usual program.

Of the many ways out of New York to the South, the one via Newark is now and probably will continue to be the most com-

monly used, though it crosses the Jersey meadows over about five miles of the worst riding in civilization. It follows for the most part the New York division of the Pennsylvania Railroad, and regarded as the parent trunk line, it absorbs all optional beginnings before or at New Brunswick. Take any one of the three Pennsylvania Railroad ferries — Twenty-third, Desbrosses or Cortlandt streets, but in a great majority of cases, of course, the first-named—to their common terminus at Jersey City. Go out from the ferry house, and at the end of the (one) block, turn left into Hudson street. From this first corner it is possible to reach the Hudson County Boulevard on macadam and asphalt, and though it is somewhat of a roundabout beginning, it is well worth while. "To the Boulevard" and "No Trucking" signs help to point the way, and especially if one has a reliable map or some advance knowledge of it, little or no trouble will be experienced. On Hudson street, then—the first left turn from the ferry house—go a single block to York street, up York five blocks to Henderson, there turning right two blocks to Mercer street, bringing up alongside the City Hall.

Clear now of street cars and heavy traffic, one may increase speed up Mercer street, which is kept for a number of blocks. Pass under two pieces of elevated railroad track, then over a brick-paved

viaduct built to carry the road by an easy grade to the higher ground beyond. The change from Mercer street to Glenwood avenue is in name only, for after a straightaway run of three or four minutes, one comes upon the Boulevard—a broad macadam thoroughfare crossing at right angles. Turn left upon it, crossing at once Montgomery street, which of itself runs straight back to the Pennsylvania ferry. But it is stone-paved and the less direct route already described is therefore to be preferred for automobiles.

About a mile farther on, the Newark Plank Road, a car-tracked and at first a stone-paved highway, leads off squarely to the right. This heathen combination of plank, stone blocks and bridge work (over the Hackensack and Passaic Rivers) is the one direct way to Market street, Newark. It carries first into either Ferry street (left bend) or Bowery street (right bend), two connecting links to the same junction with Market street, which keep up past the Pennsylvania Railroad station to Broad street, the center of the city. On the way over, one has not only bad going, but must take chances with street cars and heavy traffic. Once across the meadows, however, the worst is over and the tourist is well placed for the balance of the run.

THE NEWARK-NEW BRUNSWICK PORTION.

Turn left from Market onto Broad street and continue two or three minutes' ride to Clinton avenue, a fine, broad, asphalted thoroughfare leading to the right alongside a small park. In two or three minutes more you come to where Astor street—a narrow asphalted lane for which it is necessary to watch—cuts squarely off to the left; this take and follow two blocks, when Frelinghuysen avenue will be seen to branch diagonally off to the left. This avenue (called at times also Newark avenue) is car-tracked all the way and not altogether good riding, but it is direct into Broad, the principal business street of Elizabeth.

The center of the city is marked by two large railroad viaducts, one (the Pennsylvania) above the other (Jersey Central), but at a different angle. The old route followed Broad street under both, thence ahead to where Rahway avenue branches off to the right. But this means several blocks of stone pavement, and it is much better for automobiles, just before coming to the viaducts, to turn right up Westfield avenue to Cherry street into Rahway avenue, joining there the old route out from Broad street. This

change provides good riding every foot of the way and cuts out the Pennsylvania Railroad crossings altogether.

Rahway avenue is now direct, only that it becomes St. George's avenue (in name), and goes around Rahway instead of down into it. In the event of going into this place—at least a half dozen approaches show themselves—it will be necessary to go back the same way; instead take West Milton avenue outward from near the railroad station, coming into St. George's avenue a mile or so farther on. The next two miles to Iselin are poor but passable, thence past Colonia Station, crossing the tracks two or three times on the way, and by Menlo Park to Metuchen. Through Metuchen, without turning right or left, it is a perfect road, with only easy grades, to New Brunswick. The latter is entered by a down grade to the bridge crossing the Raritan River and Canal into Albany, the principal business street. For all practical purposes this completes one-third of the Philadelphia run, 36 miles out from Manhattan.

THE NEW BRUNSWICK-TRENTON PORTION.

For the middle section there is at this time one thoroughly good route for automobiles, and that the Cranbury Turnpike. It makes at first a considerable dip south by east to Cranbury and Hightstown, then south by west into Trenton, and is several miles longer than the old road and path via Princeton. But it is a perfectly surfaced state road, which only snow and ice can make impassible; whereas the Princeton line is good going only in long-settled summer or fall weather. Tourists wishing to make the latter, however, will get from the dotted lines on the accompanying map the general direction and the names of the places passed through and, if the time be well chosen, a very interesting and picturesque run will result. But on account of its all-year reliability, the Cranbury Turnpike must be the standard route until the Princeton line is put into equally good condition—a project now under consideration by the State.

Leaving New Brunswick, keep Albany street to the business center of the city, turning left on George, the principal cross street. This follow until Commercial avenue leads up and off to the right, bringing into the hard macadam of the Cranbury Turnpike. Be sure to keep Commercial avenue actually into the turnpike, for the natives will usually dismiss your inquiry with the sole direction to "follow the trolley line." The latter gets there, sure enough, but by a route of its own, impossible for an automobile to follow.

Once on the pike the way to Trenton, though far from straight, clearly shows itself, and it is mostly open country through which fair speed can safely be made. Past the Red Lion and Black Horse taverns—memories of old stage coach days—the route passes within a half mile of Deans, the last station before Trenton on the main line of the Pennsylvania Railroad, then through Dayton, on the branch running east from Monmouth Junction. The next place is Cranbury, which gives its name to the turnpike—a quiet little town entirely off the railroad and apparently 100 miles from a stock ticker or a steam whistle; then Hightstown, the two connected by a horse-drawn stage.

Hightstown, the largest place as well as the central point on the turnpike, is also a station on the Camden & Amboy division of the Pennsylvania Railroad, and is entered by passing beneath the tracks onto the main street. Well up in the town the road forks at a fountain, two apparently good lines going out, one right, the other left. Take the right fork, which soon comes alongside the railroad tracks, and follow them without a break to Windsor. Here turn right, cross the tracks at right angles, and go ahead two miles to Edinburg, thence by a left bend into the last—and straightaway—stretch to the outskirts of Trenton. Just ahead of where the State fair grounds are seen over to the right is Greenwood avenue, a fine asphalted thoroughfare, slightly to the left at the beginning (with the car tracks), then direct through the best residence section, until it comes to an end, where North Broad street crosses at right angles. Here also Center street goes out diagonally to the left, which take for two blocks to Bridge street (the old First Baptist Church on the corner). Bridge street almost immediately closes down upon the Pennsylvania Railroad tracks, and it is necessary to cross them at grade, swinging up alongside at once for a narrow connecting link to the bridge entrance, 32 miles from New Brunswick and 68 miles from New York. Toll is charged foot passengers and all vehicles. The crossing is without special interest except that there is a fine view of the State Capitol and the upper city on the way over.

The Delaware, being an interstate boundary, you are at once in Pennsylvania, the exit being like the entrance along the railroad tracks until past the Morrisville Station. At the four corners just beyond, turn left on the Bristol pike, a fair-to-good but not an easy riding highway. Cross the tracks again at grade, then go under the viaduct upon which the new tracks will be laid, swinging

up on the other side for Tullytown and Bristol. Keep straight on—for a distance immediately alongside the Delaware River and never far away—into Bristol. When opposite the ferry to Burlington, on the Jersey side of the river, turn right, go through the business center of the town, taking the first left after another crossing of the tracks. This gives a clear route over Neshaminy Creek, past Eddington Station, into and through Holmesburg and Torresdale into Frankford avenue direct to Frankford, already a Philadelphia suburb, 25 miles from Trenton and 93 miles from New York.

Frankford avenue is likewise the first link in the final stretch into Philadelphia. Keep to the right, with the street cars, over Frankford Creek into Kensington avenue, which keep for a considerable distance. Pass shortly under the New York division of the Pennsylvania Railroad, and later over the Richmond Branch of the P. & R. After this last crossing, turn right into Lehigh avenue, which keep for about 14 squares into North Broad street, the junction being immediately above the Huntingdon street station of the P. & R. Here turn left and take North Broad street downtown, about three miles on excellent asphalt, to the public buildings, the center of all things in the Quaker City. It is almost exactly 100 miles from New York, and automobile storage and repair stations are seen in plenty for the last half-dozen blocks.

When Greek Meets Greek

"Jump Spark and Billy Brassey met for the first time yesterday, and they got on together famously. They kept up their talk until late in the evening."

"What were they talking about?"

"Automobiles and golf."

"But Sparks don't know the first thing about golf."

"Neither does Brassey know anything about automobiling. But that makes no difference. Each kept it up on his favorite topic without listening to the other."

On Personal Grounds

"You say that man who is loudly denouncing automobiles is a doctor?"

"Yes—a horse doctor."

Options on the Philadelphia Trip

AFTER dealing with so large and intricate a subject as the road systems connecting New York and Philadelphia, more or less for the information of automobilists unacquainted with the territory, it appeared the better way to define a direct and standard route, without likelihood of confusion at the time with the large number of options presenting themselves practically from beginning to end. While this course requires the mapping out of one through line concerning whose component parts all may not agree, a framework is thus provided for the grouping of the optional route-portions in a way to aid selection from among them according to the preference or special plan of the tourist. And so if the trip narrative appear to look neither to the right or left, it may be said that only this feature keeps it within the bounds of a single article, for the convenience of readers. The key to the rest is the supplementary information given herewith as fully as space permits; and if there be still any essential points overlooked, subscribers are invited to take them up with our correspondence department.

Broadly speaking, there are four optional beginnings of the trip toward Philadelphia, as follows: (1) our standard route, through Jersey City, Newark, Elizabeth and Rahway to Metuchen; (2) an outward and upward movement from Elizabeth, through Roselle, Cranford and Westfield to Plainfield, thence downward to Metuchen; (3) Jersey City to Hudson County Boulevard to Bergen Point, ferry to Port Richmond and along the north shore road of Staten Island to the Elizabethport ferry and Elizabeth, thence either of the above to Metuchen; and (4) from South Ferry, Manhattan, to St. George, Staten Island, across the entire length of the island to Tottenville, ferry to Perth Amboy, and road again to Metuchen. Thence, all routes alike, to New Brunswick.

1. The first is described in detail and diagramed in this issue.

2. The second separates itself from the first by the fact of continuing on Westfield avenue out of Elizabeth, to and through Roselle and Cranford to Westfield, instead of bending left on Cherry

street, Elizabeth, for Rahway avenue and its connections as given in the standard route to Metuchen. From Westfield it is a short run in the same direction to Plainfield, thence downward to Metuchen. There are perhaps six extra miles in this detour from the direct Elizabeth-Metuchen line, and nothing special is gained in taking it, except perhaps variety in case one would otherwise go and return by the same route.

Regarded as another form of this last detour rather than as a separate and logical beginning of the Philadelphia trip, is the upper circuit from Newark through the Oranges. There is no better riding in the Metropolitan District than through this cluster of towns and cities; but some extra time is needed to include them in a through southward itinerary. But the going is good and the tourist from a distance going so near by, will find this side-issue a pleasant experience. Bound this way, take the standard route to Broad street, Neward, turn right (opposite direction now from the standard route,) and keep same until one block past the small Military Park alongside Broad street. Here turn left, up Central avenue, and by Harrison street to East Orange, thence to Orange, South Orange, Milburn and Springfield to Westfield, Plainfield and Metuchen.

3. The third is a short route from Jersey City and all North river points on the Jersey side to Elizabeth, avoiding Newark entirely. It takes the standard route to and through Jersey City and into the Hudson County Boulevard, only that instead of turning off into the Newark Plank road, one keeps on straight to Bergen Point ferry. Here cross to Port Richmond, Staten Island, and take the North Shore road direct to Howland Hook, where ferry is again used to Elizabethport. Land near the Crescent shipyards, and take Jersey street through to Broad street, Elizabeth, thence up Broad street to Rahway avenue and the standard route to Metuchen. This option is an entirely practicable but withal a curious one, from the fact that you take two ferries and some stone pavement on Jersey street, Elizabethport, in place of the Newark Plank road, coming into a common point on Rahway avenue.

4. The fourth and last regular option is the shortest of all, not only to Philadelphia but also to the New Jersey coast resorts. It is the only one that avoids Jersey City entirely, and this it does by a radical departure at the very beginning. Dowtown to the tip end of Manhattan, take South Ferry to St. George, Staten Island,

cross the full length of the island on good roads to Tottenville. The main road itself—called locally the Amboy road—ends at a private dock on the Arthur Kill or Staten Island Sound. But if one will look off to the right just before coming to this point, he will see the ferry, with a short connecting street between. Go down to the ferry and take same across to Perth Amboy, N. J.

Once across, go straight ahead with the electric cars and follow them more or less of the run to Metuchen, mostly good but with two or three bad stretches. However, it will be necessary in this case to go up through the town, for the standard route from Rahway cuts across the outer section of Metuchen. Go through the town under the viaduct carrying the Pennsylvania R. R. tracks to the station just above, until a left turn opens the way into that common stem of all lines, the six miles of direct riding between Metuchen and New Brunswick. It is possible to go with the electric cars from Perth Amboy near to but not down into Metuchen, then by Bonhamton and Piscataway to New Brunswick. This is a short cut between the two points, but the road is not good enough to justify cutting out Metuchen. Again it is shown how the Metuchen-New Brunswick line is the one common fraction of the entire optional series.

Distances from New York to New Brunswick: Standard route (1) 36 miles; Westfield-Plainfield detour from Elizabeth, route (2) 42 miles; Hudson County Boulevard-Port Richmond-Elizabethport line, route (3) 30 miles; Staten Island-Perth Amboy

route (4) 28 miles. In point of time required, the four are nearly equal, since each case of smaller mileage is offset by the ferry transfers. In making such a run as that to Philadelphia, therefore, one may choose which way he wishes to begin his journey, and by that choice scarcely affect the results of even the first half-day.

The reasons compelling the selection of the Cranbury turnpike between New Brunswick and Trenton for the standard route are necessarily given in the narrative of the trip. Between these points the additional options are nominally two, in reality one. The old Trenton-New Brunswick turnpike is a 24-mile air line connecting these points—shorter even than the railroad mileage. But the right of way was secured many years ago by the railway interests, and it was speedily made impassable as a whole for road vehicles, and so it remains to-day. It is not in use by the steam lines themselves, and what is left of the ties laid upon it years ago to secure the legal right to it spoil it as a thoroughfare of any kind. There is nowhere a worse example of a fundamentally good highway sold to and practically abolished by overreaching private interests.

From New Brunswick to Trenton via Princeton is an easy matter so far as directions are concerned, this way out of New Brunswick being simpler than that to the Cranbury turnpike. Continue straight out on Albany street, cross under the Pennsylvania Railroad tracks and on to Franklin Park, bending left not far beyond to Kingston. Thence across the Millstone river to Princeton, and out past the University grounds, on to Lawrenceville and through to Trenton, coming into Brunswick avenue, down to the soldiers' monument. The first portion to Princeton is somewhat hilly and not uniformly good; the second portion is more level and easier on all accounts to cover. Distance from New Brunswick to Trenton by this line 29 miles, less by three miles than the standard route over the Cranbury turnpike.

The soldiers' monument is a good place to call the center of Trenton, and several roads and avenues come into or near it. Only one through route does not touch this locality—our standard route from the State fair grounds in the upper city to the Delaware river bridge—which makes for itself a nearly straight and the most direct line possible between these two points.

Coming into the center of Trenton from the standard route, one does not necessarily turn off onto Greenwood avenue, but may keep right on Clinton avenue to State street, which is held until across the Pennsylvania Railroad tracks and the Delaware & Rari-

tan canal. Here take Stockton street, to Academy, and go on Academy to Montgomery, thence direct to Brunswick avenue and by a left bend to the monument. At this writing, however, lower State street is in process of repaving, and for the time being the Greenwood avenue route is preferable. When using the latter into the center of Trenton, keep until across the railroad and canal, where turn down Lewis street, passing over the head of Market street, right into Stockton street to Academy street to Brunswick avenue and the monument as heretofore.

If for any reason it is desired to reach the main station in Trenton of the Pennsylvania Railroad, Greenwood avenue passes near to and in sight of it. If southbound, take Clinton street just before coming to the crossing of the railroad and canal; if northbound, turn into Clinton street just after making this crossing.

Outward from the monument to the same Delaware river bridge (whether from Brunswick avenue, by the Princeton option, or from the standard route carried into the center of the city instead of direct to the bridge), turn down Warren street. Follow this until it comes into the Pennsylvania Railroad tracks just before the river; here turn down alongside the tracks for a narrow way to the bridge, and the standard route is found again toward Morrisville, the first station in Pennsylvania, and the gateway to the Bristol turnpike.

OPTIONAL ENTRY INTO PHILADELPHIA.

The 25 miles from Trenton to Frankford offer no advantageous choice of routes to the Quaker City. There is, indeed, but one other possible way—by Bordentown and Burlington to Camden, thence by ferry into the lower part of Philadelphia. This road—largely the Burlington turnpike—is hilly and hard going; and not, therefore, to be recommended. It may be followed, however, when

one is sure of his power supply and anxious to vary a previous trip. The single ultimate advantage of the Bordentown-Burlington route is that one may very easily go onto the Atlantic City road from Camden; and if bound from the Trenton district to the Jersey coast that way, he is enabled to pass entirely around the city of Philadelphia.

The one remaining option of this series is that from Frankford to Philadelphia, and it is somewhat less direct than the standard route. It has the advantage, however, of being over perfectly good roads from beginning to end, and one who prefers to make the extra distance and the larger number of turns, will find the following directions entirely suitable for that purpose:

Go into and through Frankford, as before on Frankford avenue, bending slightly to the right onto Kensington avenue. However, turn squarely to the right into Nicetown lane almost at once—the first right after crossing Frankford creek—which is at the bottom of the moderate descent out of this suburb. Beginning rather inauspiciously and never straight for any considerable distance, Nicetown lane is a hard-surfaced thoroughfare, and after three or four miles of good riding will bring up alongside the new Cathedral Cemetery.

At the corner where the greenhouses are, turn left into Second street, which take one square to Erie avenue. Follow Erie four squares, after which turn diagonally down the equivalent of about two squares on Rising Sun lane to Venango street. Take Venango street, by right turn, and cross first the Old York road, then Germantown avenue, a square beyond which one will come at right angles into North Broad street. Turn left here and it is direct to the public buildings—the end also of the standard route.

If these directions are puzzling to understand in reading, they are certainly not difficult to follow, and the accompanying map will give a good general idea of the situation. The short stretch of Rising Sun lane is but a means to an end, as it is necessary to get from Erie to North Broad street—only a short distance—in some irregular way, since Erie avenue is not opened through as Venango street is. When this is done—which should not be long—the final directions of this optional line will be much simplified. Meanwhile the Frankford-Philadelphia map has been prepared with a view to its use also by tourists reversing its direction, and outbound from Philadelphia to Frankford. In either case, if a direct but poorer road is preferred, take the Broad street-Lehigh avenue-Kensington avenue route; otherwise the more roundabout but almost perfect detour via Venango street, Rising Sun lane, Erie avenue, Second street and Nicetown lane.

In the Language of Proverb

He that trusteth his automobile to the care of a hired man shall come quickly to grief; but he that careth for it himself shall flourish like a branch.

A wise man feareth and departeth from crowded streets; but the fool cryeth "Selah!" gets in the middle of the push and is confident.

A righteous man regardeth the life of his carriage; but the tender mercies of the scorcher are small and far between.

He that is void of wisdom criticises his neighbor's vehicle; but a man of understanding holdeth his peace.

It is better to ride alone in a trolley car than with a nervous woman in a brass trimmed speed car.

A smooth road maketh a cheerful countenance; but by a rough one are repairers made glad.

When scorching cometh, then cometh shame; but with the careful rider is wisdom.

The fool rejoiceth in his speed; but the wise man looketh well to his going.

European Notes of the Month

NO automobile accident probably ever caused more widespread comment or elicited more universal regret that that by which Mr. and Mrs. Charles L. Fair lost their lives at Pacy-sur-Eure, France, on the 14th of August, last; but it a little curious that the frequency of accidents recently from the same cause has passed practically unnoticed.

The mechanic employed by Mr. Fair has stated that shortly before the accident occurred, the left rear tire punctured, and as the car was going at a speed of sixty miles an hour, he called upon Mr. Fair to slow down, but either from inability or disinclination to comply, the advice went unheeded. Almost immediately after the puncture the car failed to obey the steering gear, and swerving from the road ran up a bank and into a tree, the occupants of the front seat being killed instantly, while the mechanic was severely injured.

This accident was almost identical, except in its consequences, with that which occurred to the Hon. Charles S. Rolls in the Paris-Vienna contest, and to Domptet, the Clement driver, who was fatally injured while returning from the Ardennes races. The tendency of tire makers is to produce tires of an egg-outline section, the narrower end forming the tread. When such a tire collapses the car is left running on three wheels, and if two of them are behind correct steering is hopeless. Some remedy for this defect has got to be found or the crop of accidents in the case of fast running cars is going to be a heavy one.

A remarkable performance by Mr. Hewetson, on a Benz car, came to an end when he made his fiftieth consecutive daily run of one hundred miles. Mr. Hewetson's object was to demonstrate the reliability of automobiles generally, and, of course, of the Benz particularly. On every day he carried an observer to note the cause of any stoppages and their duration, but these officials appear to have been little needed. The Benz is a belt-driven car and Mr. Hewetson is reported to have stated that he never touched the belt from start to finish, although he had occasion to renew his sprocket wheels and to tighten his chain once. The weather the greater part of the time was of the most trying description, and the small amount of trouble experienced was remarkable. The tires used were Clipper-Michelin in front and Connolly solids behind, an arrangement which Mr. Hewetson found to work admirably, since he had only three

punctures, simple ones, in the fifty days, and only inflated the tires ten times. The car, a 5-H. P. vehicle, is to be sold by public auction for the benefit of King Edward's Hospital Fund.

There is a good, considerable controversy in British automobile circles as to the merits of the Hon. John Scott Montague's bill, which has been introduced into the House of Commons, and a good deal of placid sentiment has been written regarding it. The bill provides for the abolition of the present absurd legal limit of fourteen miles an hour, placing self-propelled vehicles on the same footing as other road users, but it also requires automobiles to be registered, and calls for every car to bear a distinguishing number. It is to the latter provision that exception is taken, and the opposition has assumed such proportions that the A. C. G. B. & I. has called a general meeting to discuss the matter. It is inevitable that the legal limit will never be removed without numbering, and unless a change takes place ere long in the conduct of certain owners of high-speed cars the obnoxious proviso may become law without any countervailing advantage. There is a growing feeling among local authorities in favor of numbering as a means of checking reckless driving, and as cars increase in number and fools multiply, numbering will certainly follow.

Automobile events have followed each other in such rapid succession this year that the ordinary man finds some difficulty in keeping run of them. Paris-Vienna was quickly succeeded by the Ardennes, then Welbeck, and now Deauville. The distinguishing feature of the last-named meeting was the lowering of the kilometer record to 26⅘ seconds by Gabriel on a Mors, and this was only one-fifth of a second faster than Chauchard's time on a big Panhard. Deauville, a suburb of Trouville, a French summer resort on the estuary of the Seine, reserves its esplanade one day in the year for the kilometer trials instituted by the Auto-Velo. The track is not a model one, being rather rough on the surface, and as it is only a mile and a quarter long, either the starting or stopping distance must be inadequate. The track also bends slightly about 400 yards from the finish, and this is a defect which drivers dislike most. The conditions being taken into account, the times made were wonderful, for, in addition to those named, a Serpollet went over the course in 27⅕ seconds, and this would probably have been beaten by M. Serpollet himself on another car, had not, when he was well on for

the finish, a joint in the burner gave away, preventing the car from crossing the line. Another remarkable performance was that of Rigal on an 8-H. P. Buchet tricycle, his time being 28⅘ seconds, a speed equalled by Pannecake on a 70-H. P. Panhard. In all there were six better performances than Serpollet's 29⅘ seconds at Nice, and four better than Jarrott's 28⅘ seconds at Welbeck a week before. A wonderful meeting.

During the late South African conflict the War Office came in for many hard names, one of the commonest charges being that it was behind the times, an antediluvian department which had survived by many years its period of usefulness. In the matter of automobilism, however, it is more up-to-date than many so-called modern institutions, and from the passing of the Act of 1896 has displayed an intelligent and sympathetic interest in the movement. Last December extensive trials of various types of lorries for transport purposes were instituted and the report of the committee has now been published. The general tenor of the report may be grasped from one of its sentences: "The committee are of the opinion that it has been demonstrated that mechanical transport of this nature has many advantages, and that it is well worth a more extended trial."

All the lorries but one were steam propelled, the exception being an internal combustion motor run by Milnes & Co. Of this car the committee report that they "desire to call attention to the great possibilities for military purposes of the internal combustion lorry burning heavy oil, as shown by the small fuel consumption and practical independence of water," and they "strongly recommend that steps to develop such lorries be proceeded with." But it is not in heavy vehicles alone that the War Office takes an interest. It has purchased various types of British and at least one foreign automobile, and one of the most interesting features of the coronation procession on the 9th of August was the tour of inspection of the arrangements by H. R. H. Field Marshal The Duke of Connaught on an automobile. During the August maneuvers on Salisbury plain General Sir Evelyn Wood, the commanding officer, proceeded from point to point on one of the official cars, while more recently Field Marshal Lord Roberts and staff made a tour of inspection round the coast of Kent on motor vehicles, the nucleus of a future Volunteer Automobile Corps, some ten in number. This interest of the military department can have none but a beneficial effect on the automobile industry in this country.

The editor of a British automobile publication, irritated no doubt by the prominence given to the most trifling accident to any self-propelled vehicle, has retaliated by publishing a list of accidents caused by horses in Britain during five days beginning the 26th of August. The list was compiled from all the newspapers which the editor could secure, but there were, of course, many beyond his reach, and besides many accidents in remote districts no doubt went unreported. The accidents were fifty-two in number and resulted in five persons being killed, while sixty-five were injured. The pity is that such information is only read by automobilists, while the exaggerated accounts of motor troubles are special features of the daily press.

Glasgow, Sept. 15. ALEXANDER F. SINCLAIR.

Documentary Evidence

"The two best automobiles I ever knew——" began the reconteur.

"Excuse me," interrupted the precise man, "but you should not say that."

"I hadn't got started yet. How do you know what I was going to say?"

"I was referring to your English. 'Best' is superlative, you know. There can not, therefore, be more than one 'best.'

"Can't eh? That shows how much you have to learn."

"There's nothing to prove the contrary."

"Oh, yes, there is. Take any magazine and read the automobile advertisements."

Controlling of Power

"How are you getting along with your automobile?" asked Miss Querymore.

"Well," answered Willie Dogcaryt, "I can run it all right, but it will be a long time before I can get over saying 'geddup' and 'whoa' to it in place of pushing a couple of levers, don't yer know?"

The Best Thing He Could Say

Teacher—But can't you define "automobile?" Suppose some one asked you what an automobile is, what would you say?

Pupil—I'd say, "Don't you know what an automobile is?"

When Nature Preaches

ROSALIE KENT FORD

Oft as returns this solemn morning
  Wherein temporarily I tour no more,
Within the kirk, with dim forewarning
  If service long and sermon bore,
A doze comes softly o'er me creeping,
  I mount as in a dream meanwhile,
And, the suburban byways seeking,
  Depart unnoticed down the aisle.

Glad to forego the sermonizing
  That slowly from the pulpit drones
For other sermons emphasizing
  Thems lves in running brooks and stones
Their messages with thought are burning,
  Their manuscript no one perceives,
Although with subtle charm returning
  October gayly turns the leaves.

And sets the hillside brightly blazing
  As all the trees proceed to don
And draw 'fore my ecstatic gazing
  Again their autumn flannels on.
I blush to think chill winter's breathing
  Will soon those garments rend away,
All stark and bare their branches leaving
  Exposed in sad décolleté.

I rush along the pleasant meadows
  Where fringe eyed gentians smile and gleam,
And muse upon the wandering shadows
  Reflected in the placid stream.
The cattle on the hill are grazing,
  Their final picnic of the fall;
A tender, soft, autumnal hazing
  Suffuses and encircles all.

Oh, sport supreme, sublime, undying,
  My spirit ye create anew,
As thus ye bear me on, defying
  The limitations of the pew.
What though the winter fiercely raging
  Benumb the autoist's outer day,
He finds the season still engaging
  Within the realm of fancy's play.

REALLY, I can barely escape exploding with indignation when I think that I was swapped for a team of bob-tailed cobs, and a black-walnut, mirror-fronted folding bed, simply because I refused to go up a hill on Riverside Drive when I was tired and only half-fed.

It takes a vehicle with a good disposition and strong motor power to resist running away and smashing things up generally, under such circumstances.

My new owner appears to be a doctor, and I hope that he won't ask the impossible of me.

Monday

Well, that doctor certainly is a wonderful human. I pity the horse that he drives. I'm sure that I have traveled fifty miles up and down, and across this city to-day.

After visiting a free dispensary on the east side (where a number of taffy-faced, inquisitive children climbed all over me), and stopping about fifteen times for house calls, he finally alighted at a stylish brown stone residence on the sunny side of Madison avenue.

I grew very impatient at the expiration of an hour and came very near going home alone, but was glad I didn't, when the genial doctor assisted a handsome little woman into the seat beside him.

Now I know why we called at that fashionable florist's store this morning, and I also imagine to whom the violets we bought there were sent. I fear, though, that the little woman has lost some

dear friend, as she dresses in deepest of mourning (it's mighty becoming, just the same).

TUESDAY

This morning when "we three" were out for a spin on the "Drive," the widow (Mrs. Bolton) remarked most pleasantly, "Doctor, I have ridden in many different styles of motor carriages, but I have never found one that runs so smoothly and rapidly as this one does."

There are few women who possess as much appreciation and tact as Mrs. Bolton. I shall be very careful when I have her out not to balk or refuse to run; but those trolley and cable car bells are so distracting, and one can never tell when there is a car directly behind until that absurd bell jangs and clangs.

WEDNESDAY

Another busy day. It seems as though the doctor likes Mrs. B. very much, because now as soon as we are through with the regular daily visits, he doesn't need to drive me up to her house, because I know the way and always head right up Madison avenue and stop at her door.

This afternoon while we were going up Fifth avenue I overheard the doctor remark: "I am very lonely keeping bachelor's hall." (It must be very lonely for him, because he is such a jolly, sociable fellow.)

THURSDAY

When the doctor and I called for Mrs. Bolton this afternoon we went up to Grant's tomb, and then to Claremont for tea. As we reached the memorable spot where I "balked" that day I was slowing up to get breath for the hill when I saw my former owner dashing by with the bob-tailed team I was swapped for. I let out a snort, took a spurt and led those horses such a race up that hill as they never had before.

FRIDAY

I have decided to end my miserable existence and commit "autocide" by swallowing an overdose of gasoline and eating a box of sulphur matches. As long as Mrs. Bolton is not pleased with my color (black) I do not care to live.

It happened this way: Dr. Elliott, the little widow and I were running along the East Drive in Central Park just as nice as you

piease, when suddenly a dark green, French-looking tonneau passed us; it was a beautiful shade, I must admit, and I was just beginning to hope that Mrs. B. had not noticed it, when she turned to the doctor and softly remarked: "Why don't you change 'The Black Knight' to green and call it 'The Green Cloud' and have it bright and shining like that stylish motor car which just passed us? Besides, I am so tired of black, Dr. Elliott."

The doctor gave a sly side glance toward her, and she blushed and looked across the tennis grounds.

But I cannot forget that she does not like me, so it will be best to end my misery quickly.

SATURDAY

"Alas! how easily things go wrong," so some one remarked when he had stacked a brand new automobile upon a stone wall through a defective steering gear, but I say, "how good it is that sometimes they go right."

I had made all the necessary preparations to end my career this morning, even to secreting a box of matches which the doctor had dropped, when Fate stepped in and saved me from making a dreadful blunder.

It seemed as though the last office patient would never go, and time lagged upon my wheels fearfully. Here it was that dear little Mrs. Bolton appeared upon the scene and changed everything.

I had intended to have my explosion take place right in front of her house in the presence of both the doctor and her pretty self, but it was not to be.

At ten o'clock the doctor had just mounted the seat and was about to push over the lever which gives me the signal to start off when a fashionably-gowned, stylish-looking woman hove in sight steering an apple green enameled tonneau car.

Naturally my jealousy was aroused by the very thought of that odious color, and without another glance at the dainty chauffeuse, I took the brake in my sprocket teeth, as it were, and up and collided with that tonneau right there and then.

I can't write much about the affair because the shock was so violent that my motor and driving gear were wrecked—but this I do remember, that as I was being towed away for repairs, the doctor shook his finger knowingly after me and said, as he assisted Mrs. Bolton (who had fainted) into his office: "You've accom-

plished more with this smash-up of yours, than I could have done in a year of courting."

I hope that they will spend their honeymoon with me in Paris and take a trip on the continent. I would enjoy a roaming life for a year or so, I know.

That green tonneau tried to get into conversation with me this afternoon in the repair shop where both now are: the upstart! I will have nothing to do with it.

(I understand that the little widow only hired it for an hour, anyhow, so as to tease the doctor.)

The Lay of the Contented One

Give me a pair of sturdy legs
  And fair outfit of feet,
And I'll forego the automobile,
  However fine and fleet.

For where's the autoist who knows the wood,
  Or views the cloud flecked sky?
Or leaps the fence to meet a lass
  A-comin' through the rye?

To every glimpse of loveliness
  His begoggled eyes are blind;
He only sees the skimming road,
  And counts the miles behind.

And should he meet a maiden fair,
  He can't think aye or no
Ere he or she have whisked apart
  A dozen leagues or so.

Then give me my convenient legs,
  That go where'er I bid.
Heaven keep them always tireless
  As when I was a kid!

Cleveland Comes to Her Own

CLEVELAND, which, by the by, comes pretty close to being the home of the American automobile, has shown how interesting a thing the racing of automobiles can be made, provided the affair is properly managed.

On September 16, the Cleveland Automobile Club, at the Glenville track, gave a day of exciting sport, which sent the ten thousand spectators thereof home with an Oliver Twist-like desire for more of the same kind.

The two star events of the day were Winton's regaining of his honors from Harkness, and the excellent performance of the White steam vehicle. Driving his now famous "Bullet," Winton placed the track record for the mile at 1:02¼, the new figures being made in the second mile of a pursuit race in which he defeated Harkness. In a subsequent race Winton again vanquished Harkness, and in doing so, altered the figures for 10 miles to 10:50.

As a sort of consolation for its two defeats by the American-made Winton, the German Mercedes won a 5-mile race in record time of 6:32¾. But Mr. Harkness was not allowed even that honor, since after the event it was discovered that his big German racer was overweight for the class to which contestants in the event were limited, and so his record and win were not allowed.

Considering that it took the finest and most expensive 40-H. P. foreign-built racing car 6:32¾ to do five miles, the traveling of a like distance in but 9¼ seconds more time by a light American steam vehicle, the White, was truly a most convincing argument in favor of Cleveland built vehicles, which now hold the records for gasolene, steam and electric vehicles, the Baker being the electric one of the trio. Sometimes a phophet is not with honor in his own country.

The summaries:

Five Miles.—Steam, all weights; silver cup—Rollin H. White, Cleveland (White), first; John McDonald, Geneva (Geneva), second; L. E. Hoffman, Cleveland (Hoffman), third. Time by miles, 1:48½, 4:02, 6:18¾, 7:55½, 9:53½.

Five Miles.—Gasolene, 1,000 pounds and under; silver cup—H.

S. Moore, Cleveland (Elmore), first; J. D. Dickson, Cleveland (Cleveland), second; George W. Dunham, Cleveland (American), third. Time by miles, 2:26¾, 4:03¾, 6:51½, 9:04¾, 11:19½.

Five Miles.—Gasolene, 2,000 pounds and under; silver cup—H. S. Harkness, New York (Mercedes), first; C. B. Shanks, Cleveland (Winton), second; Percy Owen, New York (Winton), third. Time by miles, 1:24½, 2:42½, 3:58½, 5:13¾, 6:32¾.

Former track record, 6:42, by F. A. Roche (Darracq), Brighton Beach, August 23.

Three Miles.—Electric, all weights; silver cup—Walter Baker, Cleveland (Baker), first; W. M. Wright, Cleveland (Waverly), second; C. E. Denzer, Cleveland (Baker), third. Time by miles, 2:08¼, 4:03, 5:54¾.

Ten Mile Handicap (for winners and seconds in preceding races, 1, 2, 3 and 4); silver cup—Rollin H. White, Cleveland (White), first; Percy Owen, New York (Winton), second. Time, 14:59½.

Ten Miles Open.—Alexander Winton, Cleveland (Winton Bullet), first; H. S. Harkness, New York (Mercedes), second; L. P. Moores, Cleveland (Peerless), third. Time, 1:50. Former record 11:09, by Alexander Winton, Detroit, October 24, 1901.

Australian Pursuit.—Alexander Winton, Cleveland (Winton Bullet), first; H. S. Harkness, New York (Mercedes), second. No time given. In the second mile Winton covered the mile in 1:02¼. Former record, 1:06⅜, by Alexander Winton, Detroit, October 24, 1901.

Ten Mile Handicap.—Percy Owen, New York (Winton), first; Paul Deming, Cleveland (White), second. Time, 13:34.

Two Hundred Yards (Obstacle Race).—R. H. Gilbert, Cleveland (Locomobile), first; Walter Baker, Cleveland (Baker), second. Time, 0:49.

Special Race, five miles to beat 6:44.—Rollin H. White, Cleveland (White), won. Time by miles, 1:24¼, 2:44½, 4:03¾, 5:22½, 6:43.

Just Suited the Scorcher

And the soul of the wicked one was next condemned to fall through space at the rate of a mile a minute for 10,000 years.

"Say," he shouted as he passed the 10,000th ghostly mile post, "this beats any riding I ever tried!"

A Pittsburgh Man's Rush Through Scotland

MR. Harry Phipps, of Pittsburgh, left a well defined streak through Scotland with a fast automobile during the summer. He started from Edinburgh to visit a friend who has a castle on the Dornoch Firth. Before reaching Inverness he was arrested twice for reckless speed, then his experience resembled that of a Frenchman who was out in the moors to shoot grouse. On returning after a tiresome day wading through the heather he reported: Grouse none, hares none, sheep three, days one.

Mr. Phipps, on the side of the Dornoch Firth, ran through a flock of sheep without stopping, and killed five. A county constable then noted the time, and telephoned twenty miles ahead to time the Juggernaut car that was approaching. This was done and more penalties were inflicted none was so hard to bear as the reception at the end of the journey.

With Modern Improvements

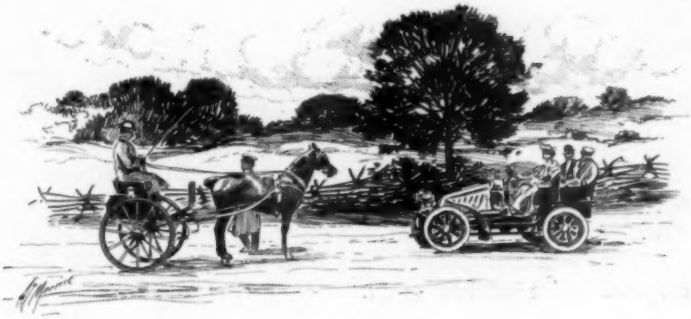
"Naw," said the owner of the "opry" house, "our folks won't stand for another blamed Uncle Tom show this year!"

"But they'll go broke to see mine, just the same," was the unabashed rejoinder of the U. T. manager. "Why, I've got my show right up with the times, I tell yer."

"Got six little Evas and a dozen Legrees, eh?"

"Better'n that, my boy, a long way past that. Just a sample: Eliza, chased by a lot of Filipinos on motor cycles, crosses the ice on a $10,000 automobile. Can you beat that?"

And as the owner had to admit he couldn't, that was why he took on just one more U. T. show at the "opry" house.



The Arena and the Automobile

IT is not easy to imagine a more vivid contrast between the old and the new than is shown in our frontispiece this month. In the arena of the coliseum at Verona, Italy, where, in days gone by, Roman chariots raced and gladiators fought, to-day is seen the automobile! The picture we have reproduced shows Mr. and Mrs. Charles J. Glidden, of Lowell, Mass., who, while on a 4,000-mile automobile tour through Europe, accompanied by Mr. and Mrs. Dudley E. Waters, of Grand Rapids, Mich., had their photographs taken in the arena after securing, at no small trouble, from the Lord Mayor of Verona, permission to invade the sacred precincts of the coliseum with an automobile. One can easily imagine what the staid and venerable official must have thought of the request when it was made to him, and how he probably granted it in the end because Americans were not as other people, and hence were beyond the comprehension of even the Lord Mayor of Verona.

A Fable and a Fact

See the man with the fried egg cap.

He is riding along rapidly in his automobile.

A large beer wagon is proceeding along not rapidly ahead of him.

The man toots his auto horn; likewise he rings a clanging gong.

"When my German friend hears that," the man soliloquizes, "he will turn out."

But the German Baron sleeping on his seat swerves not a hair's breadth, and the man unable to check his speed quick enough comes to smash on the tailboard of the Baron's beer carriage.

This shows that things do not always turn out as we expect in this world.

As to the Manner of His Going

"And must I walk the plank?" faltered the captive.

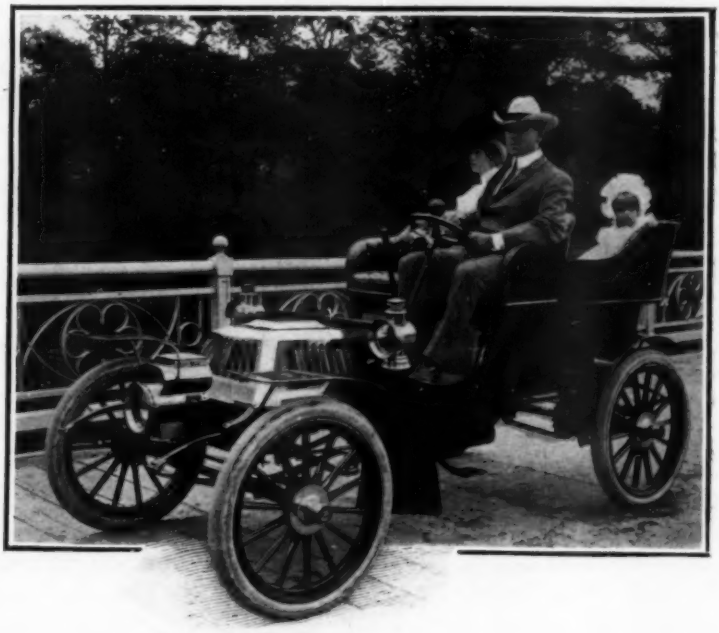
"Certainly!" replied the smart Corsair with a frown. "You don't suppose I'm going to supply you with an automobile, do you?"

Piracy is, essentially, an unprogressive industry. It does not respond to the modern spirit.

After He Had Been There

"Every once and a while we are reminded in a most vivid manner of the maxims we learned in early youth," said the man with a cross of court plaster just showing under the exaggerated visor of his automobile cap.

"Of course; most of their merit depended upon their application to everyday affairs. And yet there was one which had en-



Tonneau Designed and Built by A. L. Dyke, of St. Louis, for his own use.

tirely escaped my memory until I undertook a two weeks' tour in an automobile one week after I had bought it."

"Which was it?"

"A little learning is a dangerous thing."

Why He Walked and Wearied

Mrs. Farmer—Why do you walk the roads in this aimless manner year in and year out?

Weary Wats—'Cause I ain't got no automobeel.

Trying to Undervalue President Shattuck

I THINK that it is a wise plan for people to permit the members of clubs and similar organizations to manage their own affairs without interference from the outside; but there has been such a violent attack made on Mr. Shattuck, president of the Automobile Club of America, in the pages of the New York *Commercial Advertiser*, that I consider it the duty of THE AUTOMOBILE MAGAZINE to break its rule of silence on personal fights, and go on record in the interest of fair play. Mr. Shattuck has been a remarkably earnest, persistent and faithful worker for the Automobile Club of America, and he has exerted useful efforts to the end that all automobilists be fairly treated. These are facts that no one will deny, and the case being as it is, no thought of a change should be entertained except in favor of some one who has proved by acts that he is likely to make a more useful president than Mr. Shattuck.

The tendency of all clubs is to permit the willing horse to do the greater part of the work, and the only cause of offense which Mr. Shattuck has given seems to have been the doing of his work uncomplainingly while others looked on. I am a member of the Automobile Club of America with good opportunities for knowing the sentiment of its members, and the impression I have received is, that Mr. Shattuck is highly popular with the members at large and is under the ban of only a small clique who appear to be actuated more by personal jealousy than by a desire to promote the interests of the club. Before the members of the club permit themselves to help in displacing their president, I should advise them to weigh carefully the likelihood of another man rendering them better service.

A MEMBER OF THE A. C. A.

The Fossil, the Fishing and Precedent

A DODDERING old fossil had driven out in his road wagon to the suburbs, and, letting his horse nibble the grass, was fishing on what had been the bank of a river. The throat of the stream was dry and parched, as there was no more water to be found there than in the dining room of a Raines law hotel.

"What are you doing, friend?" inquired a traveler who was passing that way in his new, double back-acting, super-sprung, six-cylindered, forty horse-powered, electric, steam, storage battery, kerosene dos-a-vis.

"Fishing," said the fossil.

"But there's no water there! See, when you cast your fly it raises a cloud of dust as it strikes! I know a stream where there is plenty of limpid water in which the fish disport themselves. Furthermore, the wild thyme blows on its banks. Will you not come with me in this horse-bereft conveyance of mine and cast your line there?"

"I will not," replied the ancient dodo. "My son, I fished here when I was a boy, before you were born, I trow. I have caught fat fish in this stream heretofore and I may do so again. At any rate, I have precedent on my side, and I have never seen the stream of which you prate. Another thing, my people and myself have always employed horses to pull us around."

Moral.—Precedent will not catch fish, but suckers can be caught on dry land.

Present Attainments

"Don't you think, dear, we might afford one of the horseless carriages?"

"We might take the horseless part now and wait for time and good luck to bring us the rest."

Good-Roads Movement

"Wilt scorch down life's highway with me?"
I asked of the motor maid.
"If you've money to burn enough to make
A cinder path all the way," she said.

Every time a man tries to show off something is sure to go wrong.

What Ignorance Does

IT is just as easy to have a motor vehicle running as smoothly and looking as well at the end of the second or third season of its use as it is at the end of its first season, provided proper care and attention are given it. When the vehicle is bought the man who sells it to you will tell you, ordinarily, that it will run better after it has been used a while than when it is brand new.

The same principle which applies to automobiles in this respect applies equally as well to machinery of every kind. When parts are new they only get into their best running order after their newness has been worn off and the working parts have been thoroughly shaken down by use. As soon as this happens then the vehicle runs smoothly and at its best.

The motor vehicle, all things considered, is a high-strung, more or less complicated affair and should be looked upon as such. The factor of safety in an automobile's construction is not so great as that of an ox cart, yet some people handle a light runabout as though it were an ox cart or a mowing machine. In this exists the prime cause for much of the complaint brought by ignorant users against the automobile's stability.

Couldn't Call It Heresy

"The minister accused of scorching! How can that be? He never rode in an automobile in all his life."

"I know it; but some mean member of the congregation accused him of preaching more than eight miles an hour."

Cause for Worriment

"My dear," asked his wife, "what are you thinking about?"

"I was thinking," replied the theosophist, shaking off his fit of dreamy abstraction, "what kind of a motor I'll use next time I appear on earth."

Automobile Features

There's the auto face, and the racer's back,
With its queer, altitudinous curve,
And the mobile tongue, in the middle hung,
And the scorcher's motor nerve.

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From This Affliction, Deliver Us!

WITH the best possible intent to remedy an evil, which is rapidly curing itself, a lawyer of this city has introduced in the Board of Aldermen an ordinance to inspect, label, license and literally mulct, therefore, all operators of motor vehicles in New York city, with the sole exceptions of motor cyclists and trolley motormen. Under the proposed ordinance the Mayor is to appoint three persons, to be known as the Board of Examiners of Automobile Operators, who shall serve for two years, and be paid salaries from the license fees. The Mayor, however, may remove his appointees.

The application for a license must be made to the Board of Licenses, and by them referred to the Board of Examiners, who will notify the applicant to appear for examination. The Board will report to the Mayor, who may approve its findings and direct that a license be issued for one year.

The license will bear the name and address of the licensee and particulars of the machine he operates. Two lamps must be carried, each bearing the number of the license on a perforated brass band with figures at least an inch and a half high.

Sufficient cause for revoking a license will be the violation of any law relating to speed limits or affecting the use of such vehicles, the intoxication of the operator while driving, or carelessness in leaving his vehicle unguarded.

The license fee will be $10 for private vehicles and $3 for public vehicles for hire seating two persons, and $5 for more than two persons. Punishment for operating vehicles without a license is fixed at a fine of not less than $10 nor more than $50 or imprisonment for not less than two nor more than ten days.

We have on former occasions placed ourselves on record as being against any such special legislation as this. If the owner of an automobile is to be handed over to the mercy of a political board the salary of whose members will depend upon the amount they may make the owners of automobiles pay, the future of the Metropolitan automobilist is something which none but his enemies may contemplate with aught but forebodings of impending evil.

Abroad, and they manage things in this line a trifle better there than we do, an extremely lucrative business has been built up by regularly organized gangs of sharpers who make it their profession to blackmail automobilists. The vehicle owners submit rather than run the risk of losing their licenses through being haled to court and prosecuted by some shrewd figurehead of the blackmailers' organization.

That something of the same kind might happen here is not altogether an impossible thing. But whether it would or would not, the proposed ordinance remains one, the passage of which should be fought till the very last by everyone who believes in fair play, irrespective of whether they believe or not in automobiling.

Some "Horse-Power" Helps

ALMOST the first thing the man who is interested in automobiles learns to talk about in connection therewith is "horse power"; almost the last thing he ever learns what it really is, is "horse power." To the ordinary mortal the term means something so vague and so complex that he leaves its real meaning to others, while he goes on to the end of the chapter content

with a definition for his own use that it is "something which makers use to tell you how powerful a motor is."

Briefly the story of horse power as applied to power measurement is this: When Boulton and Watt first recognized the necessity of a unit for large concentration of power, it was found that 33,000 foot pounds per minute, or 550 per second, represented the capabilities of a good horse, and, though doubtless overestimated, this figure stands for the unit by which the engineer compares his engine with another.

A foot pound represents the same amount of work regardless of the manner in which it is expended. A pound weight lifted through a foot, one pound of water caught in the bucket of a water wheel and descending one foot, the piston of a steam engine moving one foot against a resistance of one pound, are instances in which the expenditure of power is precisely the same.

This does not imply equal horse power for the motors, however, since they could only be rated the same if they all performed the same work in exactly the same time. Thus, if the water wheel took two seconds to expend the foot pound, while the steam engine took only one second, the latter would have twice the rated power of the former—in other words, twice the power would be given by the steam engine as that derived from the water wheel during the same period of time.

Thus it will be seen that statements regarding the power of a motor have no value unless they are accompanied by a definite statement as to the time taken to expend the power. If this is to be expressed in foot pounds per minute, it may readily be reduced to horse power by dividing by 33,000; or, if in seconds, by 550, as the case may be.

Disadvantages of Under-Production

IT is customary to look upon under-production as a good thing in any line of trade. If factories cannot turn out desired articles fast enough to fill orders for them, so the reasoning goes, such a business cannot but be in a thoroughly healthy condition.

As a general proposition the logic of this view will not be disputed. Judged by such a standard, therefore, the automobile is one of the most robust juveniles in the commercial family. Assuming this to be true, and without touching on some aspects of the

reverse side of the picture, it is equally true that present conditions in the automobile trade have their drawbacks.

For example, leaving the would-be purchaser entirely out of the discussion—there is the agent to be considered. His position is difficult at best. Slow and uncertain deliveries make it doubly so, and in the absence of any immediate prospect of a material betterment the agent is frequently sorely put to it to stand between his customer and the manufacturer.

To tell the impatient buyers the truth would certainly not help matters. Every agent knows the value of diplomacy at certain times. No better opportunity to make use of it could be found than when he is called on to balance the scales between an impatient customer waiting for an automobile and a manufacturer delinquent because he is overburdened with orders beyond his ability to promptly fill.

It may be said that the agent at least acts with eyes open. He knows that even yet the makers of popular vehicles are unable to deliver with promptitude. Consequently, any promises of immediate delivery which the agent may make his customers are based largely at least, on false pretenses. He knows that such promises cannot be fulfilled. The result of it all is that there is a dissatisfaction all around that effectually prevents that feeling of kindliness between buyer and seller which more than any other tends to make any business a lasting success.

Of the two extremes over, rather than under, production temporarily tends to the customers' and the agents' comfort, however unpleasant it may be to the manufacturer.

One of the Chief Charms

EVEN the most rabid and opinionated of its detractors must admit that the motor vehicle exercises an extraordinary charm upon those who come within its "sphere of influence." It is worth while, then, to say a word or two in explanation of that charm, and to make the public realize that the enthusiastic automobilist is not necessarily a mere crank swayed merely by fashion and novelty, but has reasons for the faith that is in him.

The essential and controlling charm of the mechanical vehicle is that it increases one's freedom of action while reducing the friction of life. A metaphysician might describe automobiling as forming an important part of a timely reaction toward individualism

and simplicity of action engendered by the temporary triumph of collectivism as applied to transport.

The railway train is necessarily collectivist. A passenger train starts and reaches its destination owing to the combined volition of a large number of persons who want to travel, let us say, from New York to Boston. But in order to satisfy these volitions and make them executive they have to be marshaled and organized, and so, in a sense, shackled. A railroad train, with its engineer, brakeman and conductor and fixed places of stoppage, is a creature of strict rules, and those who travel on it must temporarily surrender their private wishes, or, a portion of them, in order to co-operate with others.

The man who takes an automobile and drives it along the open road, is, as it were, a freeholder, also with some of the freeholder's freedom—though, doubtless, also with some of the freeholder's limitations and weakness and isolation. Still, the charm of freedom he stops when he likes, and he can be independent of his fellows.

This charm, of course, belongs in theory to any carriage, from an ox cart to a landau, but in practice it does not operate in such cases except over very short distances. The lust of time-saving is too powerful and gives the advantage to the train.

No horse can go at the rate of twenty miles an hour for three consecutive hours, and at the end of the three hours be ready and able to go on for another three or eight or ten hours. It is its tirelessness which makes the automobile quite a different mode of transport from the horse, and gives it its superiority.

With the automobile you have a perfect method of moving from place to place which is as tireless as a train and which, for ordinary journeys, is as quick as the train, and yet one which is individualistic and independent, hence its charm, an appreciation of which is not easy to one who has not personally experienced the enjoyment of automobiling.

Users of the automobiles should reflect. The mechanical carriage is still an innovation. Society has not yet adjusted itself to thechange. People are accustomed to using the thoroughfares without having to care for more than the rattling car, or wagon, or carriage, whose sound gives warning of its approach. They are not yet used to the swift-moving, noiseless automobile; and the result has been frequent collisions, damaging to the collider and collidee, to adapt a legal expression to meet a new necessity of language. This has

tended to excite a hostility to the new vehicle that has found expression in enactments of ordinances restricting the use of automobiles in a manner often unjust. It is sure, if persisted in, to result in even more and more stringent regulations, that will impair the pleasure and benefit of motor vehiclism. Now, this is a condition wholly within the control, in the first instance, of the automobilists, either individually or through their clubs and kindred organizations. In the next instance, it is in the control of society, acting through its police force. It rests with the users of automobiles to say which method shall be used. One or the other will be.

Just why the route from Newport to New York should be chosen by sensation-seeking automobilists for record-making attempts is difficult to understand, unless it is that the word Newport is supposed to give a gilding to the performance not possible with any other word. Aside from this gilt idea a far better route and one over which checking and such like essentials for the making of a real record could be secured between New York and Philadelphia is mapped out elsewhere in this issue. Over this route records by horse, coach and bicycle exist, and the automobile would thus have something more tangible than a bogie performance to test its ability against.

One of those clever Frenchmen whose constant study it is to make perfect the automobile claims to have entirely eliminated all sparking troubles by means of a combination of the good points of both explosive and electrical ignition. Spongy platinum and carburetted air are the prime essentials in the new idea. We sincerely hope that the Frenchman has been successful, as there are few things which have added more to the labors of the recording angel than defective sparking has.

French statisticians claim that the cost of wear, tear and repair upon the pneumatic tires of public vehicles used in the streets of Paris is in excess of 20 cents per day for each vehicle. With no knowledge of the figures used to determine this French claim we are inclined to believe that the rate of five cents per wheel here given is much below what the up-keep of a pneumatic tire will average on a vehicle which plies for hire through the public streets of any city not excepting Paris.

To-day the world annually consumes between 60,000,000 and 75,000,000 pounds of crude rubber; forty years ago 10,000,000 pounds was considered an ample supply for three years ahead. No one thing is responsible for this great increase in rubber production and consumption, but the demand for rubber tires, more than any other, has been responsible for a large portion of the increase.

The employment of automobiles for military purposes is not new. Steam road locomotives were successfully used in warfare as far back as the Crimean campaign, and afterwards by the Germans in 1870 and the Russians in 1878. Even the crude vehicles thus employed demonstrated that neither steep ascents nor bad roads presented unsurmountable difficulties to military automobiles.

The Allgemeine Schnauferl Club, of Munich, has offered prizes for the best synonyms replacing the French terms for automobiling. The gentleman gaining the first prize formed from the Greek root aut, the derivative autler, the driver, and auteln, to drive, an automobile.

It is impossible to satisfy everybody with a single type of vehicle; and yet those who seemingly endeavor to avoid satisfying anybody seem to have almost as difficult a task.

In curing the ills to which even the best of motors at some time or other become afflicted, it will be found that an ounce of patience is worth a pound of profanity.

Neither progress nor the automobile have succeeded in eliminating all the people who think a horseshoe is of more use over a door than on a horse's hoof.

A lawyer is a learned man who rescues your automobile from the damage seeking owner of the horse it has frightened—and keeps it for his trouble.

No vehicle owner is truly wise who has never at some time in the course of his ownership considered himself a chump for choosing the one he did.

If finding fault were a useful occupation a great many automobilists would have no difficulty in deciding what they were created for.

Light Reflecting Powers of Metals

IN the construction of the powerful lights demanded by automobiles, a study has been made by a foreign lamp maker of material, etc., which has resulted in some interesting facts being discovered as to the varying reflective power of metals; that is, in the percentage of light falling upon them which they will reflect. It was found that reflecting power varies greatly with the color of the incident light and the nature of the reflecting surface.

For example, gold, which reflects only 37 per cent. of green light, reflects 75 per cent. of yellow light and 90 per cent. of deep red light. Of all substances polished silver has the highest reflecting power, varying from 91 to 95 per cent. according to the color of the light.

For yellow light various substances have the following percentages of reflecting power: Silver, 92.5; nickel, 62.6; steel, 55.1; gold, 74.7; copper, 59.5; glass mirrors with silver backing, 82 to 88; glass mirrors with ordinary or quicksilver backing, 71. The success achieved by the makers of some of the expensive French lamps and the failure of so many of the just-as-good-but-cheaper imitations thereof, is not altogether disconnected with just such an analytical study of the subject as is shown in the figures above given.

A Revised Charm

"Is Scorchmore superstitious?"

"Is he? Well, I should say he was. He's got an automobile tire hanging over his door for luck."

THE Freeport, Long Island, anti-automobilistic official is neither dead nor sleeping, so recent events prove. His latest victim is W. D. Guthrie, a New York gentleman, whose business and whose address is in Wall street, where his clients find him of value to talk at so much per talk for railroad and other trusts capitalized at a few hundred millions or so; in other words, Mr. Guthrie is a famous lawyer. It was Mr. Guthrie's daughter who ran into the Freeport automobile net, and her eminent father was soon on hand to tell District Attorney Nieman that he was present to defend the fair speed-law violator. The promptness and vigor of Mr. Guthrie's defiance made the District Attorney and his co-conspirators turn several legal flip-flaps before they recovered their usual selves. Mr. Guthrie asked for a continuance, and it was readily granted, though it is extremely doubtful if that case will be ever heard of again.

Mr. Guthrie is considerably worked up over the matter and suggests concerted action on the part of the automobilists against the recently incorporated Long Island Anti-Automobilist Association, which is said to number among its members some of President Roosevelt's relatives. It is not likely that the President himself will join this anti association—he don't care much for antis of any kind—although he is addicted to the horse habit, but even if he did, the family is safe because fair Miss Alice Roosevelt admires the automobile and makes frequent use of it. For the sake of the prestige that the automobile would get, I would really like to see Theodore Roosevelt become the owner of a great big racer and use same in order to dodge the trolleys, for if he had one of those big fellows he might be able to put some of the trolleys out of business, and goodness knows that would be a blessing. This recommendation is also extended to Governor B. B. Odell and the Hon. Timothy L. Woodruff, who have also been recent sufferers from the trolley car terror.

A New York agent the other day complained that he had to pay full agent's price for a demonstrating car to a manufacturer whose agency he had just taken for New York. This agent, as well as many others, is of the opinion that the manufacturer should meet the agent half way when it comes to the demonstrating car, which of course becomes second-handed after a few weeks' work and must be sold at a second-hand price. This and the guarantee the agent thinks will be important subjects for the Manufacturers' Association to consider in the near future, as there is much complaint about both questions among the agents. The guarantee of 60 days may be all right at the present stage of automobile making, but the time will soon be here when some manufacturers with confidence in their goods will increase the 60 days to six months or possibly one year. The tire manufacturer guarantees his tires, and now a wheel manufacturer is out with a year's guarantee, so all the automobile builder has to guarantee is his engine and his running gear. It is the shady manufacturer that wants a uniform, short-time guarantee; he's the man who is afraid of his goods, and he is the one who has done the automobile industry the most damage. A guarantee of 60 minutes would about suit him; just long enough for him to get the purchaser's money.

Score one for James M. Seymour, of Newark, N. J., who recently vetoed the ordinance framed by the local authorities to regulate the speed with an assortment of fines and imprisonment for speed violators. In his veto message, Mayor Seymour rightly took the ground that it was special legislation against a particular class of citizens and that the council had no more right to pass such laws than they had to pass similar legislation against drivers and riders of horses. So well taken was this point that it is said the council will not pass the ordinance over the Mayor's veto because of a threat from him that he would carry the case to the State Supreme Court if necessary.

New Jersey is palpitating at present with all sorts of threatened ordinances, and this because of a criminal recklessness of a few rattle-brained automobilists who ought to be locked up for the sake

of their own and the public safety. Judge Dixon, a prominent State official, in charging the Bergen County Grand Jury, ordered the Jury to indict reckless automobilists because of a death some time ago which resulted from a runaway team which runaway may or may not have been the fault of the automobilist. The judge, however, laid down a pretty good law which all good automobilists will approve of, and there is no doubt but that those who have the best interests of the machine at heart will strengthen the hands of the law in that respect. Said the Judge:

"If the drivers of this machine were guilty of negligence in running at that rate of speed, and if they knew that in going at that speed they were liable to cause such an accident, resulting in death, they were guilty of manslaughter. There is, however, another aspect to the case," the Court continued, "and that is that the drivers of the machine were guilty of creating a nuisance if they rode at that speed or at any other excessive speed.

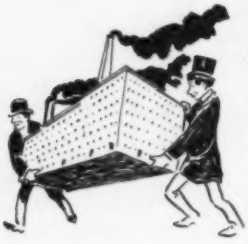
"The roads are for the common use of all, whether a person chose to use them on foot, on horse, on bicycle or in a vehicle, and any person who uses them so as to endanger others in the exercise of their right, is guilty of creating a nuisance. The automobile has no more right on the highway than any other vehicle, and it was time that an end was put to their abuse of the road." Resuming, the Court said:

"It is within the observation of everybody that these machines are run at an altogether excessive speed, endangering not only the lives of their own occupants—and that perhaps is not a matter of much concern—but the lives of everybody else. That constitutes a nuisance, and for that they should be indicted. It is not a matter of municipal or local ordinance, but it is a State law. It is not statutory law, but it is common law, as it comes down to us from our ancestors."

Automobile clubs are not growing with that rapidity which characterized the growth of bicycle clubs of years ago. It would seem that the automobilist is not attracted over much by club life. In Boston it is said the Massachusetts Automobile Club will not admit men of the trade, as the members wish to keep trade influence out of the club. I am afraid that this club will not be overly successful if it intends to continue its discrimination against men of the trade. The trade is always ready to contribute toward clubs or anything else that will benefit the sport, so there is no reason why tradesmen

should be barred from a club. To the contrary, their knowledge of machines and other matters ought to be of benefit to any club they might associate themselves with. There is talk of a rival club in Boston as there is in New York. Both of the new clubs will have a large trade element in their membership, and it seems to me that there is plenty of room for two clubs in the cities named.

The new factory which the Winton people are about to take possession of in Cleveland will, it is said, be the largest individual plant in the world devoted solely to the making of automobiles. Alexander Winton and his two co-workers, George H. Brown and Mr. Henderson, are to be congratulated upon this expansion. For once a pioneer prospers, the Winton having done a lot to popularize American-made automobiles, and the fact that many good Americans have paid bonuses this year to get Wintons, is the best proof that their maker is all right and is a prophet in his own country. You can change the spelling of prophet to profit and the statement is equally as true.



THE AUTOMOBILE MAGAZINE is constantly in receipt of letters from readers complaining that they have been swindled; there is no other word for the trick some manufacturers have of demanding money in advance and then keeping the purchasers waiting six months before he gets anything but excuses. This is a dangerous policy for any concern which expects to remain long in any business to pursue.

I do not know who invented the slogan used by the Oldsmobile people, which is "Nothing to watch but the road," but all the same that is the best catch phrase in the business, and I am surprised that it has not been more used by the company which started it. Just repeat it and see what a reassuring confidential twang it has, "nothing to watch but the road." You can imagine yourself skimming along a country road, with your arm around your best girl, and the carriage in which you are seated just taking care of itself. There is

no doubt but what the Oldsmobile Company has done some mighty good work in popularizing the automobile since there is no denying the fact that you see more Oldsmobiles all through the country than you do of any other make of machine, and I am glad to testify to this fact. Anyone can run the Oldsmobile and that is the type of machine the people want.

Mr. DeBois, the automobile broker, told me a story the other day, which illustrates the popularity of the Oldsmobile. It is a well-known fact, which will bear repeating, and that is that there are fewer second-hand Oldsmobiles for sale than any other make of vehicle, although the editor tells me a Minnesota man is advertising one in this issue, and I can see a rush for it. Mr. DuBois tells his experience this way: "Like other people, I had been trying to get hold of a second-hand Oldsmobile, and it was hard work. Eventually I got one, and immediately advertised it. The rush to my office was something positively awful and I could have sold that one vehicle twenty times over. In the end it got me into no end of trouble with one man who almost threatened to murder me because while he was out getting his money to pay for it another man gave me $25 more than the advertised price and, of course, I took it. I had to telegraph my wife that I could not be home for supper, since I had to take the disappointed man out and treat him to supper just to make him forget his troubles. I wish I had nothing else to do but sell automobiles as popular as the Oldsmobile, to do that is just like finding money."

A gentleman who will have traveled about 20,000 miles before he reaches home, was a visitor at THE AUTOMOBILE MAGAZINE office recently. The gentleman was W. A. Scott, of Dunedin, New Zealand, and he has been identified prominently with the bicycle trade in his country for several years. Mr. Scott is now preparing to embark in the automobile business, and came to the United States via England to determine what agencies would be best for him to secure for New Zealand. Mr. Scott is a quiet undemonstrative sort of man and is evidently a keen business analyst, since it did not take him long to decide after inspection what sort of machines he would undertake to sell. After looking over various steam vehicles he de-

cided that the Prescott was what he wanted in steam, and he then wanted to connect with a vehicle of the Olds pattern. He thought possibly that electric automobiles, of the runabout type, would eventually become popular in New Zealand, but for the present he considered that steam and gasolene would be about all his possible customers would buy.

George H. Day, president of the Electric Vehicle Company, has always contended that the electric vehicle would eventually win out, and through his efforts alone much of the popularity of the electric vehicle can be traced.

Mr. Newby, president of the National Vehicle Company, made a most sensational run with one set of batteries the other day in Indiana, doing over a hundred miles with one battery charge. This goes to show that batteries are getting longer lived, and we can soon anticipate the 100-mile battery, which will at once make the electric vehicle a dangerous competitor of the gasolene type of vehicle.

It is always pleasing to see young men successful, especially so if they are deserving of success. While in Detroit the other day,

I paid a visit to W. E. Metzger, one of the brightest and most energetic young men in the automobile business. Like many of the other good ones in the automobile trade, Mr. Metzger graduated from the bicycle business and is a pioneer automobile dealer. His present palatial establishment on Jefferson avenue is the result of things accomplished already, and an abiding faith in the future of the automobile. As a bicycle agent, W. E. Metzger was a bright light among lesser luminaries in his city. I remember when he was selling bicycles at Christmas when his competitors persuaded themselves that it was an off season and were not trying to do any business; he is doing the same thing in the automobile business to-day.

In Chicago I found Ralph Temple, of the Temple Austrian Company, who they say made $10,000 selling one type of machine, the Olds, last year. As a bicycle jobber Temple took the entire output of three factories. I know young Temple well, as we traveled together for over a year in Europe, and a more trustworthy and capable man than he is it would be hard to find.

Regarding the roads of New Zealand, Mr. Scott said they were level enough, but that the material used for their building was crushed rock which was not always laid properly, with the result that it was loose and rolling, a condition of affairs which the dry atmosphere and lack of rains greatly aided. At its best, New Zealand is a hard country on tires, Mr. Scott said, and the Dunlop form of tire was in favor there over all others at this time. Speaking of the prospects of automobiling in New Zealand, Mr. Scott said that New Zealanders for the most part considered the automobile a gentleman's toy, and too expensive for the ordinary man to use. This opinion, he said, was because they had not yet considered it as a business proposition.

Speaking to a well-known doctor the other day, I asked him which of the different powered automobiles in his opinion the doctors would eventually take to. His reply was that as far as his acquaintance with automobile using was concerned he was of the opinion that their likes were about evenly expressed between the electric and the gasolene vehicles. The doctor himself, however, believed the electric automobile would eventually command the favor of practising physicians, particularly now, when it is possible for the owner of an electric to put in his own charging plant like the one advertised in another portion of this issue, thereby making the owner of an electric independent and in possession of a vehicle whose noiseless and always-ready features appeal most strongly to him. He spoke of a brother doctor, the owner of a very boisterous gasolene vehicle, who told him that while visiting a very nervous patient he always left his machine about a block from the patient's residence, since the choo-choo of the motor was more than she could bear. With an electric he said he could have gone right up to the door, as in fact he might have with a steamer, but he thought the latter required too much care for a busy doctor to attend to.

Another of the old bicycle brigade is the alert Prince Wells, of Louisville, who was a successful bicycle agent and is now duplicating his bicycle success with the automobile. Prince is still a young man, this side of thirty, I believe, but he owns a beautiful

home, and the store, which he also owns and in which he does business, is the largest of its kind in Kentucky.

As a fourth example of how the prominent automobile man is quickest made from the man who sold bicycles successfully, let me point to Harry Hearsey, one of the officers of the National Vehicle Company, of Indianapolis, president of the Hearsey Vehicle Company, which has large warerooms on the Circle, of that city. Mr. Hearsey commenced in the repair shop of the first bicycle agent in Boston, then went West to grow up with the country, and he has grown so fast that he is now one of the solid business men of Indianapolis, and yet he is only a young man. Mr. Hearsey was one of the most successful bicycle jobbers in the West, and when he is not devoting himself to his family or his extensive business finds delight in a large colony of English bulldogs and Boston terriers, the kennel habit being strong within him.

I ran across a new candidate for automobile favor in the Standard Anti-Friction Equipment Co., of 50 Broadway, N. Y., recently. This company has for some time been experimenting with and perfecting an automobile tire of the single tube variety, with the result that the tire is a truss cushion and looks to me to be all right. The tire is the invention of Col. W. F. Beasley, of North Carolina, hence the name of Be-No-Ca given it. This tire, Manager E. B. Cadwell, of the Standard Anti-Friction Co., thinks, will become extremely popular since the aim of its inventor has been to retain the good qualities of the pneumatic while acquiring the strong features of the solid for lasting purposes. Mr. Cadwell is of the opinion that the Be-No-Ca has all the resiliency required without any danger of having to pay for it by constant repair work. If all things were perfect the automobile tire would of course be so, but as most things are not perfect the automobile tire is with the majority. When you come to consider what is required of a bit of rubber and some fabric when they are combined into a tire the wonder is that they succeed at all, not that they fail occasionally. The tire maker is to me a genius to whom I am always willing to doff my hat.

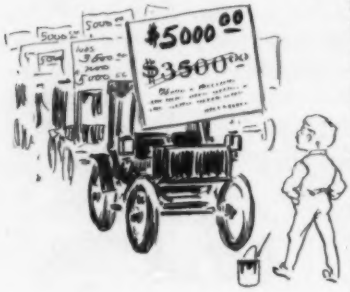
The plan of the Manufacturers' Association, or rather its proposed plan, to send an American exhibit to the next English show, is to my mind the proper caper, providing, however, that the manu-

facturers are ready to do some business abroad. An exhibit would certainly prepare foreigners for the forthcoming invasion of the old country by the American automobile manufacturer, since invade it he certainly will just as soon as his manufacturing wings are strong enough. I would like to see an American exhibit sent over there if only for the purpose of informing those who don't know that the United States is taking a mighty prominent part in automobile building these days. Dealing with the Manufacturers' Association reminds me that the labors of the secretary, Harry Unwin, is being felt, he being a conscientious and effective worker, than whom no better man could be selected to take charge of a foreign exhibit.

Dealing with automobile shows reminds me that many people are of the opinion that the 1903 ones are too late. The objectors declare the shows should be held this fall, in November, say. Personally, I really believe that October would not be too early. Nearly all the 1903 models are ready by that time, especially those which would be exhibited, and it seems foolish to hold a show just before the opening of the spring season, which will rush the manufacturer and no doubt lose him a lot of sales. If the shows were held in October and November, the agent and individual purchaser would place their orders then, thereby giving the manufacturer sufficient time to get his goods ready for early delivery. The same thing occurred in the bicycle days, and the only excuse advocates of the late show had was that they didn't want the other fellow to see what they had early enough for him to copy it in time for the spring trade.

There seems to be a want of good plain and catchy names for automobiles. The present run of names is not appropriate. In the bicycle days we had the manufacturer's name, or the names of cities, now we have a lot of "mobiles," gas, steam and other sub-names being prefixed thereto. There is plenty of room here for improvement, and I hope to see it, although once named it is hard to rename an article of commerce.

The entrance into the automobile business under their own name of the Pope family is interesting and will surely lead to good results for the trade at large. The business methods of the Pope Manufacturing Co., which were of the best, will undoubtedly be brought into play in the Pope-Robinson Co., of Hyde Park, Mass., which is the successor to the Robinson Motor Vehicle Co., of that place. The treasurer of the newly reorganized company is the well-known Edward W. Pope, a half brother of Col. Albert A. Pope, who is noted for his business conservatism and thorough business methods. The first thing Mr. Pope suggested when he became interested in the company which, by the way, is said to have some of Col. Albert A. Pope's capital in it, was to raise the price of the Robinson vehicle from $3,500 to $5,000. The old Robinson vehicle did very good work, and its run from New York to Buffalo last fall was one continual picnic for the party who occupied the Robinson touring car. The new Pope-Robinson vehicle will, it is said, match anything yet produced on this side of the water and will compare favorably with the best imported. Mr. Robinson is to remain as superintendent of the works and his efforts in this direction are to be seconded by Harold Pope, a son of Colonel Pope, who is said to have developed into quite an automobile engineer, having a good training in the famous Massachusetts Institute of Technology. The company has just completed plans for a new addition to the factory, and it is easy to see that the Pope-Robinson Co. will be distinctly in the running in the very near future.



It seems to me that the Automobile Manufacturers' Association went a little out of their way when they lectured Thomas A. Edison, inasmuch as Mr. Edison will probably become a member of the Association when his much advertised in advance battery appears as a commercial success. I think the daily papers and the automobile press did enough to Mr. Edison, when they called attention to the fact that his battery was still in the experimental stage and that the great inventor had returned thousands of dollars to people who had made advance payments upon orders for

the promised long-distance propeller. It was not courteous to write about a man who will undoubtedly be a business competitor and his desire to control the business of other people, it seems to me, is not one of the tasks the Association should lend itself to, since doing so will sooner or later bring it trouble. Surely the Association has enough to do in other directions without going out looking for hard knocks.

The wheel question is no easy one to decide when the desire of the automobile manufacturer is to give his customer the best thing possible in this direction. Now that such people as the Midgley Manufacturing Co. are making an artillery, tubular patent wheel, which they declare will outlast all of the other forms of wheels, while the wire-wheel maker is equally as positive that his wheel is superior to the wooden one, the wheel question bids fair to take up some of the debating time in our clubs during the coming winter. A large manufacturer of automobiles told the writer the other day that he had previously used wood wheels altogether, but that he had become impressed with the beauty and strength of the Midgley wheel and could use a large number of them in 1903.

Wishing to know something of an authentic nature from a new user of the tubular steel form of wheel, I called on Mr. Hastings, of Hastings and Miller, the photograph supply people, of Nassau street, New York, and found Mr. Hastings very enthusiastic in his praises of the Midgley wheel. "Why," said he, "I have just ordered a new set of Midgleys for the steam touring carriage which I am building for my own use, as the ones I have used for the past year have given me the greatest satisfaction and are as good to-day as ever. I had a punctured tire once and I'll be blessed if I didn't go 80 miles on the rim of that Midgley wheel, and when I got home that rim did not show any injury whatever. I would like to see anything else stand such a racket as that."

I was glad to see E. R. Thomas, of Buffalo, change the name of his company, as the old one was too long and not easily remembered. After October the 1st, it will be the E. R. Thomas Motor Company, and the Buffalo Auto-Bi—and the rest of it will go into oblivion. Mr. Thomas seems to have struck his gait at last, for he did a good deal of preliminary scoring at the wire before getting the word "go." When visiting the plant recently, I saw a lot of new machinery was being taken into the works, while out in the shipping department was a batch of automobiles destined for 'Frisco. Under the new régime I understand the present magnificent works have been found wanting in capacity, and so a new addition thereto is planned. It is said that Mr. Thomas bought the real estate to great advantage, while the material for the structures came for the most part from the Pan-American buildings, so the completed plant, fine as it really is, cost less for its size than any like building in Buffalo. This shows what a wide awake man Mr. Thomas is, and the fact that a big western millionaire has just put a lot of money into the Thomas concern also shows that capitalists are always willing to do business with a business man. Not a little credit for the Thomas success is due to Mr. E. B. Olmsted, the general manager for the company, who is a tireless worker and an intelligent one as well, and it is quite likely that with the new order of things Mr. Olmsted will profit also.

Mr. Munger, of the Trenton, N. J., Tire Company, which bears his name, gave me a sort of illustrated talk the other day, at his factory, on the importance of having tires firmly secured to the rim of an automobile wheel. Mr. Munger drew attention to a fact which is not always remembered, and that is, the tire and only the very small part of it which is in contact with the ground at that, is the only thing which starts and stops an automobile, since if the wheel did not stop neither would the vehicle. Mr. Munger drew attention to the insignificant and, it seems to me, totally unsafe lugs that are used for fastening the tires to the rims. When you come to look at these it is no wonder that we hear of tires creeping and pulled-off the rim. "Of course I am making these tires for manufacturers," said Mr. Munger, "but I would much rather make

our own safe style of tire if they'd take them. If a tire is not securely fastened, it is certain there will be trouble, either stopping or starting, and the suspicion has gone abroad that the recent fatal accidents were caused in a great measure by defectively fastened-on tires."

With the perfume of the Scotch heather on him, our Chief, Mr. Angus Sinclair, has returned from his annual two months' trip abroad. Among the pleasant recollections brought back with him none is more enjoyable than that of his game of golf while a guest of his old friend Andrew Carnegie. Writing to the office from Skibo Castle, Mr. Sinclair said: "I must own to defeat at the brawny arms of Andrew Carnegie, but I am going out to play in the morning with, I think an easier mark, John D. Rockefeller, Jr., who is also a guest of the castle."

Messrs. Carnegie and Sinclair labored together on the Pennsylvania system years ago, and a close and intimate friendship has ever since been maintained between the now few hundred times millionaire and the publisher of THE AUTOMOBILE MAGAZINE and RAILWAY AND LOCOMOTIVE ENGINEERING. Alfred Harmsworth, the great London publisher, who conducts and owns some fifty publications, including large dailies and magazines, gave Mr. Sinclair a warm welcome, and the Chief was given a free lever over a lot of Mr. Harmsworth's various automobiles, which the progressive millionaire uses exclusively for pleasure and business purposes.

Mr. Sinclair was much impressed by that splendid publication, *The Car*, of which the Hon. John Scott Montague, M.P., is editor and owner. *The Car* has the patronage of King Edward and the automobile nobility, and the King is often seen with Mr. Montague, the pair doing a lot of touring at times together. In future *The Car* will have an American letter from the pen of Mr. Sinclair.

THE SENATOR.

As Good As It Looks

IT had been rumored prior to last October that the automobile made by the Robinson Motor Vehicle Co., of Hyde Park, Mass., was a first class affair. Those competing in the New York-Buffalo run in the trying week of the run will not forget that the Robinson more than made good the promises of its friends. The Robinson party, four in number, looked high grade in keeping with the machine when they started out, and unlike some of the less lucky competitors, they looked high grade when they finished.

The newspaper men, some of whom dodged the issue, will remember the cheering sight which greeted them between Syracuse and Rochester, when from their comfortable perches on a special train, they observed the Robinson party proceeding along those awful roads as if on a picnic run. As they passed the little depot, the newspaper men and the bystanders involuntarily broke into a cheer as the Hyde Park party swept onward, apparently undisturbed by bad or good roads, so stanch and strong was the vehicle they were riding in. The illustration herewith shows the latest Robinson product, which certainly looks to be a worthy descendant of its illustrious New York to Buffalo forebear.